

WEEK
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BUSINESS WEEK



The War Production Board chief bolts an office lunch under the eye of the man he's working for.

In This Issue —

"Don Nelson's Men"

— A Report to Executives

SINESS
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DEX

PUBLISHED

W. HILL PUBLISHING COMPANY

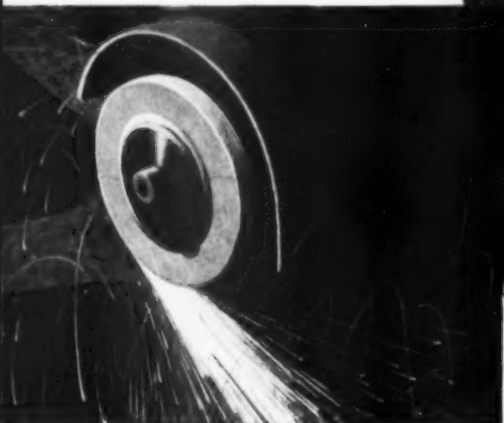
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Developments in bonding, stabilizing and densifying plywoods with "Bakelite" resins are one phase of this story. "Bakelite" resins have also solved many problems in the fabrication of metals, carbon, abrasives, cloth, leather, paper, glass... in countless ways... in varied forms. Certain types of "Bakelite" resins have helped to establish new standards of durability for paints and varnishes.

And this is *only the beginning*. As new problems are presented... to be solved by research... a host of new uses may be expected of these efficient, versatile, problem-solving materials.

• • •

The ever-broadening diversification of materials offered by Bakelite Corporation is now supplemented by the "Vinylite" plastics developed and produced by Carbide and Carbon Chemicals Corporation. The manufacture and application of these products have been greatly facilitated by the plastics-fabricating research of National Carbon Company, Inc., by the metallurgical experience of Electro Metallurgical Company and Haynes Stellite Company, and by the metal-fabricating knowledge of The Linde Air Products Company. All of these companies are Units of Union Carbide and Carbon Corporation.

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FROM Navy "blimps" moving along the coast, keen-eyed observers keep watch over the waters below. They seek to guard precious cargoes against destruction by the "rattlesnakes of the sea."

Hartford Steam Boiler is likewise on patrol duty. Its watch is of a different sort, but also important to the war effort in that production of munitions and supplies is as necessary as their safe transport. As its share in America's war effort, the Company is using all of its

technical resources and experience, all of the skill of its hundreds of engineers and inspectors, to help safeguard the vital power equipment along the industrial battle-front . . . to detect the first signs of weakness . . . to keep boilers steaming and wheels turning for victory.

In this critical time, Hartford Steam Boiler and its staff are keenly conscious of the heavy dependence which industry is placing upon them.



Covers: Boilers • Pressure Vessels • Steam, Gas and Diesel Engines • Turbines • Electrical Equipment

**THE HARTFORD STEAM BOILER INSPECTION
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BUSINESS WEEK • JULY 4 • NUMBER 670

(with which is combined The Annalist and the Magazine of Business). Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw, Founder and Honorary Chairman. Publication office, 99-129 North Broadway, Albany, New York. Editorial and executive offices, 330 W. 42nd St., New York, N. Y. James H. McGraw, Jr., President; Howard Ehrlich, Executive Vice-President; Mason Britton, Vice-President; B. R. Putnam, Treasurer; J. A. Gerardi, Secretary; J. E. Blackburn, Jr., Director of Circulation. Allow at least ten days for change of address. All communications about subscriptions should be addressed to the Director of Circulation, 330 West 42nd Street, New York, N. Y.

Subscription rates—United States, Mexico, and Central and South American countries \$5.00 a year \$8.00 two years, \$10.00 three years. Canada \$5.50 for one year, \$9.00 two years, \$11.00 for three years. Great Britain and British Possessions 45 shillings per year, 90 shillings three years. All other countries \$7.50 for one year, \$15.00 for three years. 20¢ per copy. Entered as second class matter Decem-ber 4, 1936 at the Post Office at Albany, N. Y., under the Act of March 3, 1879. Printed in 1942 by the McGraw-Hill Publishing Company, Inc.

A McGRAW-HILL

PUBLICATION

Business Week • July 4, 1942

WASHINGTON BULLETIN

WHAT THE WASHINGTON NEWS MEANS TO MANAGEMENT

It's Election Year, Remember?

Does Washington have its ear to the ground or its head in the sand?

The answer is that neither Congress nor the Administration is taking a chance on the attitude of the people. You are going to be surprised at how little will be done before the election to bring home to voters the hardships of war.

This delayed impact of the war will mean hardship for many individuals and businesses—notably as a result of failure or tardiness in making adjustments needed for survival of essential civilian manufacture and trade. The War Production Board is moving toward stabilization of the civilian economy, but the Office of Price Administration is stymied by the hostility of Congress and the political wariness of both Congress and the White House.

Gently Toward Deprivation

The average consumer, already conditioned to some extent to thinking in terms of scarcity and high prices, is being eased gently towards greater deprivation. He is assured of food, clothing, some transportation, and most of the lesser necessities.

Nelson warns that production of practically all nonessential goods has now reached the cutoff date, but inventories of some hard goods and most soft goods are still plentiful. These shelf stocks will carry both politicians and constituents past election day.

Where Trouble Threatens

Fortunately, the war production program is not hampered too much by political hocus-pocus. That's going fine; in fact, every setback on the battle fronts speeds it further.

Congress may, however, kick around the other two major phases of all-out war—adjustment of the civil economy and mobilization of manpower. Their importance is less apparent. But the effects can be terribly damaging. An eventual labor bottleneck can hurt war production and accelerate price inflation.

Policies Without Teeth

Henderson has set up his price-control program. McNutt has laid the groundwork for a work-or-fight policy (page 15). Yet neither can rely for effective application on purely voluntary compliance.

- **Law Awaited**—Under the circumstances, don't look for anything really

drastic from McNutt's Manpower Commission until the Administration, with its eye on the political horizon, is ready to send Congress a National Service Act.

OPA's Predicament

The position of Henderson and OPA is unhappy indeed. Henderson's price-control ship is already two months from shore, now finds itself in the predicament of having inadequate appropriations to fuel its boilers, and no subsidy money for life-belts.

First, the Budget Bureau, which is under FDR's immediate supervision, sliced OPA's request for \$196,000,000 and 90,000 employees down to \$161,000,000 and 66,000 employees. Then a House subcommittee advised another trimming—down to \$95,000,000 with 40,000 employees. This was whacked down by the Appropriations Committee to \$75,000,000 and 32,000 employees, and the House left it at that.

On top of this 60% cut, there was much sermonizing about too many lawyers, too many economists, too much snooping into the affairs of the little business man. Henderson was accused of playing politics—an accusation he'll undoubtedly fling right back at his accusers—and severely chided for not using more self-policing methods, more voluntary workers.

- **Congress, Please Note**—Big danger: If Henderson has to use voluntary employees to police prices (also the rent ceilings, recently extended to include 54 new areas) the rampaging consumer horde so much feared by business men may yet be let loose.

One important retail price ceiling already has cracked. Without subsidies to ease higher transportation costs, Henderson was obliged to advance the price of gasoline, kerosene, and light fuel oils along the Eastern seaboard.

As he did this, the OPA chief pointedly remarked that the increase was really "an appropriate charge against the public treasury, just as is the cost of the patrol boats with which we sink the submarine."

Subsidies' Fate in Doubt

Prospects for subsidy cash from Congress aren't too bright. One bill, calling for \$5,000,000,000, died in a hurry (BW—Jun. 27 '42, p. 17). Renewed pleas by Henderson and Wickard got nowhere on Capitol Hill this week. Congress may force Henderson into the trap of having to raise ceilings right and left, but it's still anybody's guess.

Meanwhile, OPA has had to watch cuts in quality (a hard-to-detect method of privately alleviating price squeezes), the possibility of widespread wage increases as a result of the Little Steel case, and the lack of retailer compliance in posting prices.

- **Cold Fact**—All of these will affect the price control program vitally. And until OPA can get some money, it will have to deal with them through more or less piecemeal, patternless measures such as threats of "victory" models, "buy-in-advance" plans, consumer education.

Food Men Oppose Subsidies

All segments of the food industry—from soup to nuts—have uniformly rejected government proposals to subsidize processing or distribution as a means of supporting the March price level. In a heated session, OPA's Food Industry Advisory Committee, named to seek a cooperative solution to the price squeeze on food distributors, turned back subsidy proposals and threatened to run to Congress.

Canners and bakers also have been reported as blowing cold on similar proposals. The former fear that the government might tie too many strings to any subsidy plan—grade labeling, victory brands, and other conditions which might carry over after the war. Bakers told OPA to subsidize the farmer because he is used to taking government money.

- **More for the Farmer**—As a result, consideration of subsidies as a means of supporting food price regulations has been shifted from the processing and distribution to the farm raw material level.

13 "Sheltered" Industries

Not even the interoffice memos of selective service and the war manpower commission refer to them yet as "sheltered" industries but, for all practical purposes, the 13 enterprises just identified as "essential" by War Manpower Commission are precisely that.

Aircraft, shipbuilding, ordnance and accessories, ammunition, firearms, explosives, power boilers, scientific instruments, wood distillation and naval stores, iron, steel and nonporous foundry products, poultry and dairy farming, sugar beet production, and food processing are henceforth assured of preferential treatment in the draft. Their necessary employees will find selective service appeals boards and Washington authorities, if not local draft boards, cooperative in securing military deferments.



The SABOTAGE of CANVAS *and how to STOP IT*

THE 3 SABOTEURS!

WATER . . . ducks may take to water . . . but repeated wettings are not good for canvas . . . shrinkage produces rips, etc.

FLAME . . . ordinary duck and canvas tents, awnings, tarpaulins, and what have you, are an ever present Fire Hazard.

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but now Chemistry has developed . . . and made available . . . "Phil-Pro-Tex" . . . a special finishing process . . . that makes duck and canvas not only water-repellent, but flame-resistant as well . . . and rot is retarded, too.

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Toledo, Ohio



These 13 industries get first call on the labor market because, just as they get special treatment in the draft, they get preference in job placements through the U.S. Employment Service (page 15).

As Goes Little Steel

C.I.O.'s steelworkers this week were plugging for the National War Labor Board to settle the fight for a \$1-a-day pay boost in Little Steel "on its merits," provided NWLB agrees that the "merits" were those found in the 67-page majority report of its investigating panel. That way Youngstown Sheet and Tube, Bethlehem, Republic, and Inland would have to boost pay \$1 and grant the union both maintenance of membership and the checkoff.

In arguments this week before the War Labor Board, union spokesmen took pot shot after pot shot at Office of Price Administration theories of economics. Reason was simple. They expect Leon Henderson to run to the President with the plea that a pay boost in Little Steel will prompt a whole long series of union demands for higher wages, that anti-inflation controls will be nullified.

If the NWLB were committed to supporting the findings of its panels, this week's hearings would have been hopeless for the steel companies. However, the board turns its back on investigators' findings about as often as it upholds them. Then there always is the shadow of the President over the whole proceeding—and the knowledge that he expects labor board decisions to implement the Administration's anti-inflation policies.

Tighter Control of Materials

In line with an important aspect of WPB's reorganization—a continuing, more flexible direction of the flow of materials to arms production requirements called for by shifts in war strategy—the Army and Navy Munitions Board, whose operations have been guided by Ferdinand Eberstadt, a New York City investment banker, will be merged into WPB.

This points to a constant adjustment in methods of dividing available materials between military and essential civilian requirements and between the several categories of arms.

The services have been commonly criticized for tying up supplies of critical materials far in advance of their use in production of a particular weapon, regardless of the shortage in supplies available for other, possibly more pressing needs. The services, for their own part, have been extremely jealous of WPB be-

cause the priorities setup from the outset has placed the veto power on army and navy demand for raw materials in the hands of the civilian authorities.

• **Importance of PRP**—To tighten control over distribution of critical metals, the WPB is relying on the Production Requirements Plan, which became the compulsory and basic priorities plan July 1. If this plan breaks down—and WPB insiders have their fingers crossed—WPB will be in a bad way. Nelson's own stock is bound to drop if the system flops.

Army Fights for "Cost Plus"

Cost plus-fixed-fee contracts will stay, in all probability. The War Department will fight tooth-and-nail for them.

Opposition to the proposed ban on such contracts is keynoted by Chairman May of the House Military Affairs Committee. He asserts that all jobs would take longer and would be likely to cost even more.

The Army doesn't condone the costs rung up and mistakes made in the rush to get camps and war plants built, but it was a race to keep abreast of a constantly expanding program. In recent months the Army has been working away from "cost plus" but the alternative, lump-sum contracting, means that jobs must wait until detailed plans can be placed in the contractor's hands.

Even then, the contractor's price will include a cushion against the risks he is running.

Labor Case—War Case

The National War Labor Board, in a unanimous decision by employer, labor, and public members, has rejected a Montgomery Ward objection to NWLB jurisdiction in a dispute between the company and its employees' bargaining agency. The company objected on the grounds that "the dispute does not involve work which contributes to the effective prosecution of the war."

The board's opinion that it had jurisdiction in the light of war conditions characterized the company's position as saying in effect "that because it has been the long-established policy of the company in peace times not to agree to any form of arbitration of its differences with labor unions . . . therefore, it intends to insist upon the same privileges and rights during war time." It added that "such a so-called policy of 'rugged individualism' cannot be exercised without qualifications during war times."

• **Wide Reach**—This action means that you can expect the board to claim jurisdiction, in the light of war conditions, over any labor dispute whatever which it considers likely to affect "the daily lives of a large number of people."

Navy Hires a Labor Relations Man

Edwin A. Lahey is the new special assistant in the Navy Department assigned to labor relations. A veteran newspaperman whose special field was the reporting of labor affairs, Lahey recently has been writing a

daily column for the Chicago Daily News, whose publisher, Secretary of the Navy Frank Knox, is responsible for calling him to his new assignment.

The appointment is taken as an indication that the Navy is genuinely interested in improving its relations with the unions, which have never been as cordial as the Army's. Unions have taken exception to incidents like the presenting of the Navy "E" to the head of a company in a ceremony in which the workers were not represented. The War Department has made a conscious policy of avoiding such faux pas.

While Lahey's friendships in top union leadership are expected to give him a liaison with labor officialdom which the Navy Department has had heretofore, it is also true that his friendships have cost him some enmities. Strongly pro-Philip Murray in his C.I.O. relationship, he has attacked such figures as John L. Lewis, Westbrook Pegler, and Ernest T. Weir in his writings.



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60 thousand in 1942 . . .

125 thousand in 1943 . . .

That is America's promise to the Victory Program—and America is going to beat that promise.

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WASHINGTON BULLETIN (Continued)

There'll Be More Sugar

It's not official yet, but OPA is edging closer and closer to an increase in the industrial and home sugar ration.

Pushed by an unfavorable press and widespread reports of warehouses overflowing with sugar, OPA cautiously admitted that it is studying the whole sugar picture to see whether a "moderate increase" in the sugar ration is possible. If all goes according to schedule, this should be followed in several weeks by an announcement of the moderate increase—from 70% to 80% of 1941 use for industrial consumption.

Despite Donald Nelson's original endorsement of sugar rationing, WPB's sugar experts, unlike OPA's, have never been convinced that rationing was necessary in the first place. They figured that the whole sugar situation could be handled by an 80% quota of 1941-use on the food industry, but higher policy makers insisted that it be rationed all around.

• **OPA Ready to Take Credit**—Now OPA will claim that the increased ration is the result of its judicious handling of the situation.

Pool for Broadcaster?

To pool or not to pool broadcast transmitter equipment (BW—May 2'42, p8) is the subject of a lively squabble between Federal Communications Commission and War Production Board officials.

FCC Chairman Fly wants to set up such a pool, claiming that, otherwise, 27% of stations will be off the air a year after replacement parts are stopped. WPB says it won't administer a compulsory pooling, on the theory that it can't dispense tubes unless it has some to dispense.

On Monday Fly said the pool plan had been approved by WPB, that only methods remained to be worked out. WPB claims it has done no such thing, that no serious effort has been made to take a complete census of broadcast stations and network storerooms.

OPA on Utilities' Taxes

Utilities shouldn't be permitted to increase rates simply to offset increased federal income taxes. That is OPA's opinion.

Although Henderson can't, under terms of his own law, regulate utility rates himself, his agency wants to intervene before the Maine Public Utilities Commission against the Bangor Hydroelectric Power Co. The power company wants to hike its wholesale rate to paper mills from seven to nine mills per kilo-

watt hour to anticipate boosts in taxes.

Such an increase, OPA says, would be "contrary to the intention of the Congress, inflationary in character and adversely affect the program and policies of the Office of Price Administration to stabilize prices."

• **Trial Balloon**—There have been rumblings within OPA for getting the price control law changed to knock out the exemption enjoyed by utility rates on the ground they are regulated by the states. Fate of the idea probably hinges on how well OPA fares as a special pleader with state commissions.

Lull in Tax Fight

Tax news slipped out of the spotlight this week, but the intermission will be brief. Pulling and hauling will begin again when legal draftsmen complete a formal bill based on tentative decisions of the Ways and Means Committee.

Speculation now centers on the rule which will govern consideration of the bill in the House. Customarily revenue bills come up under a rule which limits or forbids amendments from the floor. This permits Congressmen to vote the program as a whole without committing themselves on individual items.

This year's bill contains so much high explosive that the House may refuse to take it without tinkering. Odds are that amendments which do not reduce total revenue will be permitted.

Capital Gains (and Losses)

Jesse Jones' campaign to remove highway trade barriers, announced several weeks ago as a fait accompli, has bogged down. A score of states are hanging back on relaxing restrictions on truck transportation despite the national emergency standards.

Eric Johnston, new U. S. Chamber of Commerce president, is making a good impression in Washington. Back of his policy of cooperation with government and labor is a shrewd appraisal of conditions that will confront private industry after the war.

Mentioned for membership on the board of Smaller War Plants Corp. are Elizabeth Brandeis, daughter of the late jurist, and Theodore Granik, conductor of the Radio Forum of the Air.

The 75% return load requirement on over-the-road trucks, postponed until July 15, will be revamped to adopt it to the particular situations of numerous industries and trades. For many, however, it may simply be a choice between return loads or a drastic cut in over-all mileage.

—Business Week's
Washington Bureau

FIGURES OF THE WEEK

THE INDEX (see chart below) *182.3 †181.5 181.9 164.0 162.0

PRODUCTION

Steel Ingot Operations (% of capacity).....	96.5	98.0	99.3	96.1	91.8
Production of Automobiles and Trucks.....	22,935	23,225	21,500	24,620	127,926
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$37,991	\$42,128	\$38,460	\$10,511	\$23,081
Electric Power Output (million kilowatt-hours).....	3,457	3,434	3,323	3,234	3,157
Crude Oil (daily average, 1,000 bbls.).....	3,719	3,721	3,877	4,081	3,847
Bituminous Coal (daily average, 1,000 tons).....	1,854	†1,888	1,881	1,792	1,723

TRADE

Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	79	79	79	86	89
All Other Carloadings (daily average, 1,000 cars).....	62	60	61	47	58
Money in Circulation (Wednesday series, millions).....	\$12,231	\$12,208	\$11,971	\$11,224	\$9,490
Department Store Sales (change from same week of preceding year).....	+9%	-3%	-2%	+7%	+17%
Business Failures (Dun & Bradstreet, number).....	198	180	210	161	229

PRICES (Average for the week)

Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	229.7	229.4	230.0	217.8	203.2
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	154.9	154.1	152.9	149.1	140.9
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	179.3	180.3	183.5	171.4	147.4
†Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
†Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
†Copper (electrolytic, Connecticut Valley, lb.).....	12.00¢	12.00¢	12.00¢	12.00¢	12.02¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.12	\$1.14	\$1.13	\$1.21	\$0.98
†Sugar (raw, delivered New York, lb.).....	3.74¢	3.74¢	3.74¢	3.50¢	3.50¢
Cotton (middling, ten designated markets, lb.).....	19.22¢	19.00¢	19.44¢	17.57¢	14.46¢
†Wool Tops (New York, lb.).....	\$1.195	\$1.191	\$1.209	\$1.274	\$1.246
†Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	21.89¢

FINANCE

90 Stocks, Price Index (Standard & Poor's Corp.).....	65.5	66.2	65.0	67.8	78.5
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	4.34%	†4.34%	4.30%	4.42%	4.30%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.84%	2.84%	2.85%	2.86%	2.75%
U. S. Bond Yield (average of all taxable issues due or callable after twelve years)	2.34%	2.32%	2.33%	2.41%	2.20%
U. S. Treasury 3-to-5-year Note Yield (taxable).....	1.17%	1.17%	1.03%	1.04%	0.68%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	†-1%	†-1%	‡%	‡-1%	‡%

BANKING (Millions of dollars)

Demand Deposits Adjusted, reporting member banks.....	25,948	26,058	25,511	23,994	24,046
Total Loans and Investments, reporting member banks.....	31,587	31,677	31,726	30,293	28,279
Commercial and Agricultural Loans, reporting member banks.....	6,505	6,546	6,557	6,784	5,825
Securities Loans, reporting member banks.....	844	838	938	954	939
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks...	17,361	17,364	17,180	15,173	14,304
Other Securities Held, reporting member banks.....	3,508	3,537	3,584	3,678	3,651
Excess Reserves, all member banks (Wednesday series).....	2,650	2,790	2,540	3,056	5,145
Total Federal Reserve Credit Outstanding (Wednesday series).....	2,698	2,803	2,584	2,499	2,249

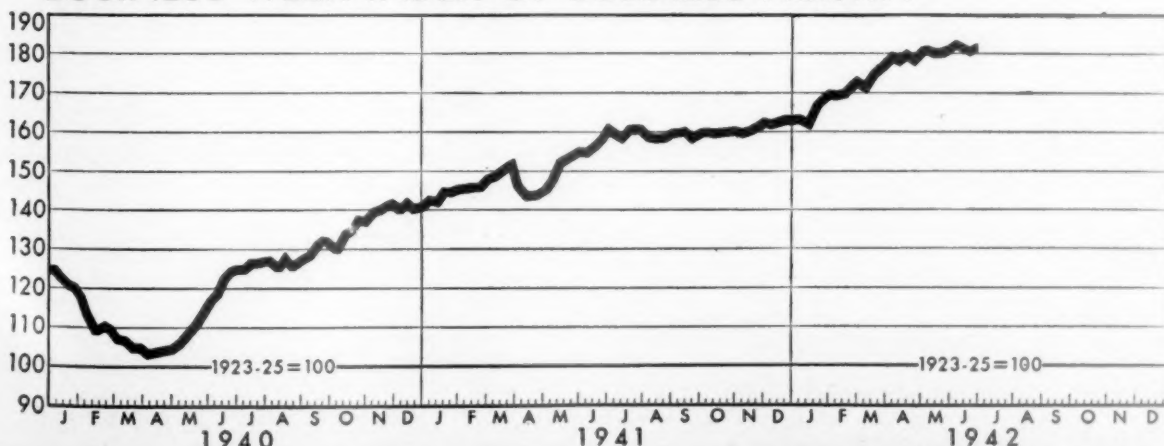
* Preliminary, week ended June 27th.

† Revised.

‡ Ceiling fixed by government.

§ Date for "Latest Week" on each series on request.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY



Why G-E Fluorescent Lamps "stay brighter longer"

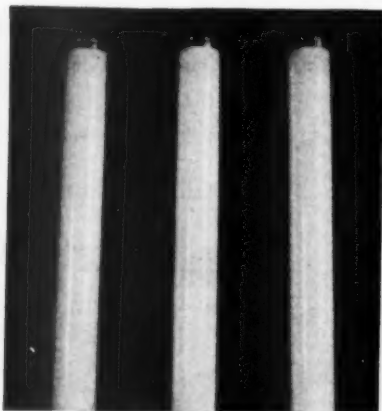
A STORY WORTH READING IF YOU WANT BETTER LIGHT TO SPEED WAR PRODUCTION!



1 DR. W. A. ROBERTS OF G-E LAMP DEVELOPMENT LABORATORY, photographed in the glow of synthetic phosphors he helped develop for coating G-E fluorescent lamps. These phosphors are one of many reasons G-E MAZDA F lamps *stay brighter longer* . . . give you more light for your money today than ever before! Up to July 1, General Electric had spent over 450,000 man-hours on fluorescent lamp research.



2 A TINY DROP OF MERCURY LIKE THIS is accurately measured and safely injected into G-E Fluorescent Lamps by an automatic machine designed by G-E engineers. Results: lower cost, better operation.



3 UNRETOUCHED PHOTO of 3 40-watt G-E MAZDA F lamps. One is brand new, second has burned 2030 hours, third has burned 2650 hours (150 hours over rated life). Note absence of end-blackening.



4 GREATER COLOR UNIFORMITY is assured when controlled and checked by "electric eyes" with color filters . . . one of many regular checks and inspections in G-E's Fluorescent Lamp factories.



5 WHEN YOU BUY FLUORESCENT LAMPS, look for the G-E monogram. It means they *stay brighter longer*! For best results, use certified lighting equipment. General Electric, Nela Park, Cleveland, Ohio.



G-E MAZDA LAMPS

GENERAL ELECTRIC

THE OUTLOOK

Pressure Under the Price Lid

First ceiling is punctured and further trouble threatens the controls over "hot money." Rail freight performance makes bright spot in the nation's rationing picture.

The battle raging on Egypt's swirling sands (page 37) continued to hold the headlines this week—and justly so. For in the balance may hang the strategy, duration, and even the outcome, of the war.

But on the home front, events were posing immediate problems for business. The Office of Price Administration punctured its first retail ceiling by advancing East Coast gasoline prices 2½¢ a gallon; a fact-finding panel cleared for War Labor Board consideration a \$1-a-day wage boost to 180,000 "Little Steel" workers, and Secretary Morgenthau admitted that June war bond sales fell well short of the month's \$800,000,000 quota.

Not According to Plan

Certainly, these developments do not accord with the Hoyle of wartime civilian control. Leon Henderson's forecast this week of 15 new rationing programs is clear indication that supplies of essential consumer goods will be down to rock-bottom levels before very long. The job is to forestall demoralizing shortages of those necessities, inequities in their distribution, inflation of prices, and all that these imply—deterioration of quality, black markets, the "inflation gap," etc.

But, considerations of the moment are at cross-purposes with the aims of high policy. Thus, failing the provision of funds to subsidize oil producers for higher freight costs, Henderson had to assure tankcar shipments by lifting the "gas" price. Similarly, while OPA's anxiety to control quality is evidenced by grading provisions in the new beef and veal price regulation, its order on seasonal apparel, rushed through to end a standstill of industry activity, practically invites deterioration in order to maintain profit margins.

When Will It Get Hot?

More serious in the long run, perhaps, is the temporizing with the "hot money" danger. Apparently, Administration policy still is to grant wage increases to offset partially the rise in living costs since the last preceding contract. At the same time, action on the tax bill is slow, and the feeling is that voluntary savings must be tried before the public can be forced to buy war bonds. The question is: How long will excess purchasing power wait?

Fundamentally, the constant increase in consumer income and the equally steady decrease in civilian production spell a widening "inflation gap." Right now, the pressure on the price structure is being eased by temporary factors.

Slow Starting

On the supply side there are heavy stocks of goods in the hands of both consumers and retailers. On the demand side, it takes time for the public to adjust its spending habits to an increased buying power, particularly with instalment and other consumer credit still to pay off. But once the income-sales tide turns, it will spill over the price dam into black markets—unless taxes, savings, and wage stabilization serve to siphon off enough of the excess money.

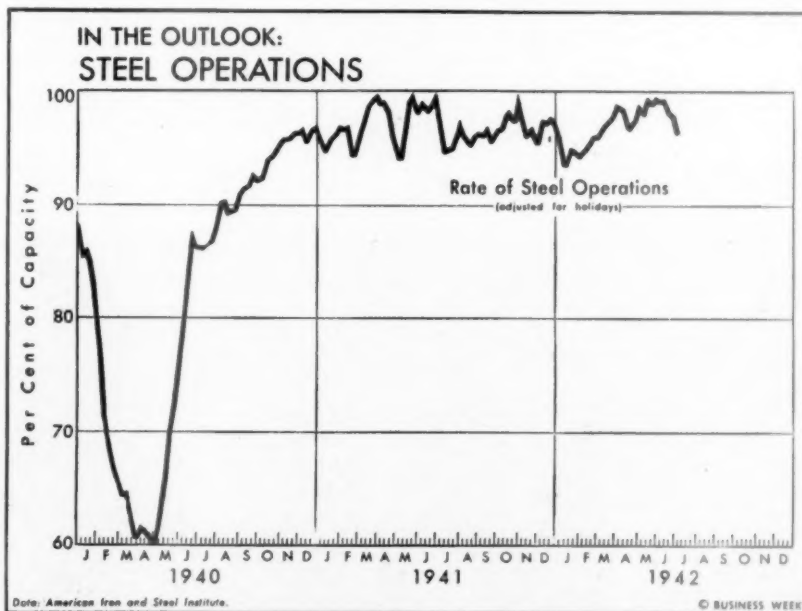
The specter of freight rationing has just about been laid—for 1942, at least. Even Joseph B. Eastman, cautious chief of the Office of Defense Transportation last week implied that full 1942 freight needs could be met—at the same time warning against any optimistic relaxation of those efforts by which the railroads have accomplished a miracle of increased efficiency.

Statistically, here's the picture he sees: In the first half of 1942, carloadings were up only 6% over 1941. But the railroads moved about one third more ton-miles.

Chief reason is that more freight is being loaded per car. Most dramatically, the ODT has set minimum tonnages for less-than-carload freight (BW—Apr. 4'42, p28) boosting the requirement to eight tons a car July 1. Last week, i.e., loadings were estimated at 70,000 less than a year ago.

Smoother Operations

Also the roads are moving longer hauls—business taken over from intercoastal merchant ships—which ties up freight cars longer on the road. Offsetting this,



Steel operations are off again this week, 1.5 points to 96.5% of capacity. The mills did heed Donald Nelson's admonition that "we dare not have a July 4 holiday in war production." But once more scrap shortages and shutdowns for repairs forced a decline. So tight are steel supplies that Nelson last week boasted the saving of some 275,000 tons by use of substitutes in

small ships, tugs, and barges, and the Army publicized another 275,000-ton economy in steel specifications for its trucks. Yet each 1% of unutilized capacity means the loss of 17,000 tons of ingots a week. Since Jan. 1, 1,600,000 tons more steel would have been produced at capacity operations, and 2,700,000 tons more at 102.5% of capacity—a rate figured practicable.

shippers have cooperated to reduce loading and unloading times, and periods that cars stand idle.

Another boon has been the ironing out of seasonal highs and lows in railroad use. Under capacity war operations, industry no longer concentrates shipments at the peak peacetime trade season. In addition, efforts to encourage

coal stocking have succeeded and now the War Production Board is asking paper users to build inventories during off-peak loads.

The net result is that total carloadings have been running below 1941 levels for the past several weeks.

This railroad achievement is taking place in the face of a 32% cut below

estimated 1942 needs in consumption of steel for new cars, rails, locomotives, etc. More important, it promises something which rationing cannot—that the nation's war effort will not be slowed on the transportation end. For, in the not too distant future, almost all the demand for freight facilities will be for war and essential civilian needs.

THE MIDDLE EAST—SHOWDOWN HAS COME

The great battle for the Middle East is on.

Egypt is only the first goal, but it is the most important one (page 37) because it is a communications bottleneck which Britain has armed for decades to defend in just such an emergency.

• **Lack of Bases May Hurt**—Though it is 1,000 miles beyond Egypt to the second great objective of any Middle East campaign—the great oil fields around Mosul, Basra, and the Persian Gulf, there are no major United Nations bases beyond Alexandria and Suez from which to defend them.

This is the grim prospect which faces the United Nations at the beginning of July—at the start of what are bound to be four of the toughest months of the war.

• **Too Much Optimism**—Since early this year all authorities have agreed that the outcome of the war would be decided in 1942 (BW—Mar. 14 '42, p. 34). April and May were months of unwarranted optimism, created mainly by the fact that little hap-

pened and by the impression that the Axis had lost its striking power.

But June, though it brought no decisive battles, chalked up a string of dangerous Axis moves—in Russia, China, the Aleutians, and in Libya. These made even the layman realize that this war is likely to be long and serious, that the job can be accomplished by no other means than by developing the United States' fighting power to the utmost.

• **This Summer's Possibilities**—As July begins, executives should realize that during the next few months the whole Middle East may be lost to the Axis. Siberia may be attacked by Japan, the Germans and the Japanese may join forces in the Indian Ocean, and the Chinese government may lose control of the last territory along the Pacific seaboard from which air raids could be made effectively against Japan by China-based American planes.

What is important, both for the immediate and the long-term future, is the time required by the Axis to

carry out these plans. For it is plain now that the United Nations have decided to open a second front in Europe.

• **Why Russia Got Help**—To win time needed to prepare for the new front, desperate efforts have been made in the last four months to deliver equipment and supplies to keep the Russian front intact while the new front is getting organized. The policy of aiding Russia may even explain why Egypt was not overwhelmingly supplied with men and tanks.

Everything indicates that we are preparing to concentrate on the nearest front—in Britain, which is a bare 3,000 miles away. In contrast, it is from 12,000 to 14,000 miles to the Middle East (around Africa), and 7,000 miles to Australia from our West Coast ports.

• **Need for Speed**—Berlin has undoubtedly sensed this change in strategy. The United Nations must open a second front before the Axis has time to organize and utilize the riches of the territories it may win.



Here's the Manpower Program

Employer doing the most important war job has first claim on a worker, and employee is expected to go where his skill is most needed. Government is prepared to see that both heed the rules.

Methods for mobilizing America's manpower for war production now have been blueprinted. Employers are on notice as to how workers must be shifted from industry to industry, employees as to their liability for transfer.

• **Eight Directives**—This far-reaching program is embodied in the eight new directives of the War Manpower Commission which went into effect this week. These are specifically addressed to five different government agencies; an employer might conclude that he is not directly concerned, but he would be wrong, dead wrong.

The new orders, designed to promote "effective mobilization and utilization of the nation's manpower," are aimed straight at every employer and at each of the 40,000,000 men between the ages of 18 and 65 who must either carry a gun or turn a wheel in an economy tuned up for war.

• **A "Must" Proposition**—It's all voluntary—so far. Pressure against noncooperators, at the outset, will be no worse than unfavorable publicity. But if the War Manpower Commission doesn't get cooperation it is ready to coerce—even to jail sentences.

Taken separately, each of the eight directives calls for only a modest extension of the War Manpower Commission's influence over labor supply and in labor market factors which are traditionally free and unregulated.

Directive No. 1, the "Essential Activities and Essential Occupations Directive," tells the U. S. Employment Service to prepare (a) lists of essential activities; (b) lists of essential occupations; and (c) lists of critical war occupations. USES is further ordered to describe simply each of the occupations listed and to classify each one in terms of the "minimum training time or experience required by an untrained individual to attain proficiency."

• **WPB's Responsibility**—No. 2, the "Critical War Products Directive," is addressed to the War Production Board. From now on WPB must keep the Manpower Commission constantly informed on the relative importance to the war effort of all plants which need additional employees and must transmit the information as far as possible in advance of the date when workers will be needed.

A "Placement Priorities Directive" addressed to USES is No. 3. It provides that "all personnel, funds, and facilities" of the service be used to place workers in "essential activities" in preference to any other placements and that the routing

of workers to jobs be in accordance with the relative need indicated by WPB. Placements are to be promoted "irrespective of the location of the work" except where the Manpower Commission may decide that wages, working conditions, or other factors disbar an employer from consideration.

• **Pressure on Individuals**—No. 4, "Directive to Encourage Transfers to Essential Activities," directs USES to speed up the occupational classification of every man who registered under selective service. If the occupational questionnaire which each registrant must submit to his local draft board or any other source of information reveals that the individual is not "utilizing his highest skill in an essential activity," USES must call on him to report to his nearest public employment office and must "exert all reasonable efforts to persuade him to transfer to suitable work."

USES is further ordered to report to the Manpower Commission whenever a registrant refuses to be persuaded or an employer in any way deters a worker from transferring to a job which USES offers him.

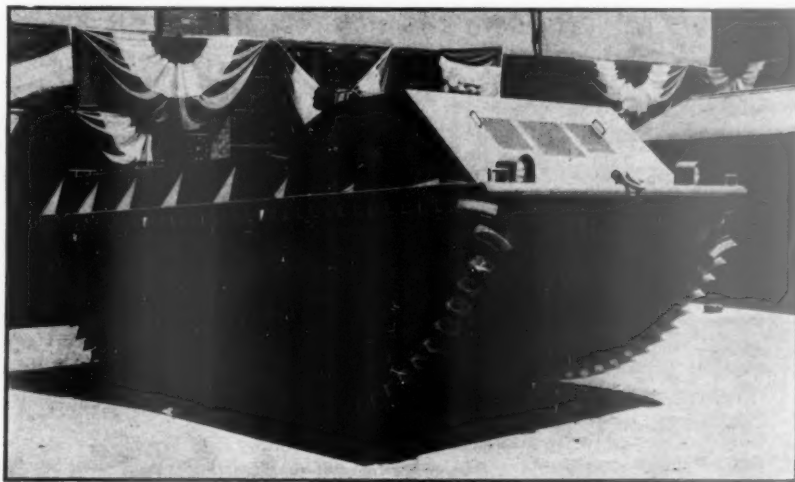
• **Military Deferment**—Directive No. 5, "Essential Occupational Deferment Di-

rective" went to the Director of Selective Service. He is ordered to transmit all lists of essential activities and occupations which he receives from USES to local draft boards and to see that men engaged in such jobs are deferred from military service. He is further directed to grant to men who have an important skill but are not utilizing it in an essential job, time to get such a job before they are inducted into the army.

The "Directive to Expedite the Recruitment and Placement of Essential Agricultural Workers," No. 6, establishes a close liaison between the Department of Agriculture, the Works Progress Administration, the National Youth Administration, the Employment Service, and the Manpower Commission. WPA and NYA workers, youths, and students will be funneled into farm jobs which the Department of Agriculture tags essential. Farmers will be encouraged and assisted to use agricultural labor cooperatively, and key farm hands will be kept in their jobs through a USES policy of not referring them to industrial opportunities.

• **Shelter for Farm Hands**—No. 7 is a "Directive to Assure Adequate Housing for Transient Essential Agricultural Workers." In effect, the Secretary of Agriculture is ordered to provide adequate shelter for farm hands lest lack of it cause them to migrate to urban areas.

No. 8, a "Directive to Provide Adequate Transportation for Workers in Essential Activities," is addressed to the Office of Defense Transportation and other related agencies. ODT is told to



AMPHIBIAN TANK

Navy officials have permitted publication of the fact that Graham-Paige Motors Corp. is in production on land-water battleships which add to their accomplishments of traversing rugged country by moving at good speed on the water or sloshing their way across swamp. No details on size,

armoring, production rates or performance have been released. The same endless tracks which propel the craft on land furnish, with scoop-like treads, the motive power for water transit. The Navy says these craft will be employed to transport "men and materials," characterizing them as "freight car" vehicles as well as fighting instruments.

make transport facilities available for "workers transferring to, moving between, or engaged in essential activities," and for "workers requiring transportation between their homes and places of employment in essential activities."

• **Rules for the Duration**—Although not one of these directives presumes to tell an employer or a worker what he should do, and although they spell out no penalties, they nevertheless add up to rules which will prevail for the duration.

Before the eight directives were promulgated, the War Manpower Commission's chairman, Paul McNutt, urged industry to do its hiring through USES (BW—May 16 '42, p5). With that as preliminary, the new orders fill out the following pattern:

Every man between the ages of 18 and 65 who is not in the armed forces will have his capacities and abilities measured against his present job. If he can do a more important job or can be trained for one, he will be shifted into it. The employer who has the first claim on his services is the one deemed by WPB to be engaged in the most important war production job. If that employer's labor needs are filled, the next most important war producer gets the worker.

Any worker or employer who does not accept the Manpower Commission's disposition will first be made uncomfortable, then prodded by an adverse public opinion which the commission intends to direct against him, and, finally, if the first two methods don't get results, coerced.

• **Applying the Heat**—Workers who refuse to shift from present jobs into work which USES considers more important will be reported to their local draft boards. It isn't "take this work or fight"—yet—but the Manpower Commission is counting on local draft boards to consider the "uncooperative" attitude of registrants when filling quotas for the Army.

To put pressure on "uncooperative" employers, the Manpower Commission will shortly establish local labor-management committees. These committees will hear complaints against firms charged by USES or other interested parties with ignoring manpower policy. A company that is found to have hired workers who are more important to the war effort elsewhere will be made the subject of War Manpower Commission press releases. Individual workers who are not impressed by USES's report to their local draft board about their lack of cooperation will find themselves losing time and pay as they appear before local manpower committees.

• **Intermediate Step**—The local committees are to be the intermediate step between voluntary cooperative and coercion. If the committees fail to get effective observance of labor allocations and priorities, they will be followed by a system of stiff penalties.



TUBE PACKAGE REVAMPED

Several months ago the RCA Mfg. Co. employed Charles I. Elliott, 27-year-old packing engineer, to study the company's methods of handling radio tubes during the manufacturing process and preparing them for warehousing and shipping. He found that existing methods required 210 separate pieces of packing material to get 1,000 tubes through production and shipped. When he had finished redesigning, 24 pieces did the job. His new shipping carton for 100 tubes (right) holds them in two single-piece

heavy cardboard trays, instead of 23 pieces of packing material (left). All packages for all classes of transmitting and receiving tubes have been similarly redesigned with the result that only 280 tons of cartons and other packing material will be used in 1942 to do the same job done with 400 tons in 1941, and do it better. Big savings accrue also in packing time, breakage, shipping space, and money. RCA is granting patent rights to its six tube-making competitors. American Standards Association is considering the new specifications as "American War Standards" for electronic tubes.

"Keep Well" Drive

Life insurance business, with Washington's blessing, ties its biggest public relations campaign to war health problem.

The life insurance business is embarking on the broadest public relations campaign it has ever undertaken to put the emphasis on living, not dying. At the same time, the industry is hitching its publicity directly to the war effort.

That's what the Institute of Life Insurance's new health drive boils down to. It promises to mark a new high in the institute's effort to wash out the injurious headlines made by the Temporary National Economic Committee's life insurance hearings, and it is launched, interestingly enough, with official blessings from Washington.

• **War Medical Problem**—The "Keep Well Crusade" as the campaign has been named, is described by the insti-

tute's president, Holgar Johnson, as a major contribution to the war effort. It stems from the estimate that 35,000 nurses and 40,000 doctors and dentists will have been drawn into the services by the end of the year.

With the health of war workers in mind, the Administration's manpower chief, Paul V. McNutt, endorses the campaign with the statement that "nineteenths of industrial disability is caused by disease and injury not associated with occupation." Sponsoring the drive on similar grounds is Surgeon General of the Public Health Service, Dr. Thomas Parran, who worked with the Institute in planning this activity.

• **Five Slogans**—Posters stressing five slogans—Eat Right, Get your Rest, See Your Doctor Once a Year, Keep Clean, and Play Some Each Day—will be used extensively. The main job, however, will be done by life insurance agents and local public health authorities.

The National Assn. of Life Underwriters, composed of the country's life insurance agents, is planning to set up local committees throughout the land.

Postwar Planning—a War Job

Government agencies addressing themselves to problems of peacetime take maintenance of employment as starting point and think in terms of supplementing and aiding private initiative.

Call Labor Department, Executive 2420, Extension 577, and the answer comes: "Postwar Division."

It's just routine to the girl who answers the phone, but the effect on an inquirer's ear is reassuring to say the least. One gets the impression that there always was, always will be, a Postwar Division ready to deal with the effects of any war that may happen along.

● **Peering into Future**—The fact is that a dozen or more units scattered around Washington now dedicate their days to the posing and analyzing of problems of the postwar world. Contemplation of this sort is a part of the war effort itself. The economists and statisticians who are doing the long-range planning insist that we can't put forth our best war effort unless we look ahead. They

meet the impatient skeptic who argues for winning the war first, and letting the peace take care of itself, with the question: Would you rush blindly into a postwar period without any plans at all?

Actually no blueprints have been drawn and only the future will reveal who will draw them. Meanwhile, the field for research is big enough for everybody to poke around in. There is some rivalry but, in the main, the various groups have blocked out phases—domestic and international, social and economic—indicated by their location in the government.

● **Basic Assumption**—Everybody concerned is proceeding, by and large, on the basic assumption—as stated by Guy Greer of the Federal Reserve Board's

research division—that in this country at least no large portion of the population shall ever again be permitted to go long without an opportunity for work that will assure a decent livelihood.

Usually coupled with that assumption is another—that the door to maintaining full employment should be left open to private enterprise, but that the government must fill whatever gap is left.

● **New Avenues**—Doubt that private enterprise can do the job alone is pretty general, so discussion gravitates quickly to government measures to private activity or to open up new avenues for it—avenues paved with public financing of such projects as razing and rebuilding blighted city areas, constructing new housing, revamping the railroad transportation plant. None of these offers sufficiently certain or attractive returns to private capital, but they are suggested as a basis for new private investment in many directions. Thus public financing would implement rather than encroach further upon the traditional fields of private investment.

It is a paradox that in recent years the opportunities for new private investment haven't been as numerous as they once were, but that the requirements for such investments are as great or greater than ever.

● **Bridge to Prosperity**—As after the last war, postwar planning probably will recognize that new investment is an important bridge to peacetime prosperity. The blueprinters' decision probably will be that government investment, large in itself but relatively small, perhaps, by comparison to the private investment which it generates may be the quickest route to restoring a full-blown peace economy.

At the moment the main emphasis is on laying down an historical-statistical base against which to measure the physical effects of the war and the scale of the readjustments which postwar planning visualizes. The statistical base also will furnish a means of evaluating specific plans in terms of the amount of investment and time required and the number of men for whom employment is created. Even stopgap measures may justify themselves if they succeed in maintaining employment and payrolls in the immediate postwar period.

● **Averting a Pearl Harbor**—The pressing problem is how to avoid a Peace Day Pearl Harbor, says Dal Hitchcock, young industrial engineer who heads the Postwar Division of the Bureau of Labor Statistics. A factual picture of where the economy stands at the moment of the war's end obviously will help to speed steps to avoid economic collapse or a demoralizing speculative spree.

The reconstruction job will have to be done under terrific pressure of political, economic, and social forces. It is taken for granted that Congress will demand



"WELDED" WOOD

One answer to the nation's metal shortage is a new method, known as the Vidal process, of molding large sections of wood and plastics in the manufacture of airplanes and other war necessities. When molded, the fuselage is claimed to be stronger pound for pound than one made of metal, lighter, smoother, vibrationless, and immune to such metal difficulties as rust. The thin strips of wood veneer, laminated with plastics, can be molded or curved into any desired form.



the take-down of the war production program as fast as possible. In any case it couldn't continue long after the fighting had stopped. By the end of next year there will probably be 20,000,000 men at work in the various basic war industries or serving in the armed forces, and we will be spending at a rate of \$60,000,000,000 to \$75,000,000,000 on war. We will be turning out stuff so fast that unless it's shot up we won't have room to walk around it.

• **Congressional Authority**—Hitchcock of the Postwar Division doesn't take a back seat to anybody in estimating the dimensions of the problems involved in the reemployment of the men demobilized by the war industries and armed forces. The Labor Department has direct authority and funds from Congress for this assignment. Isador Lubin saw to that a year ago. Consequently, the Postwar Division occupies, with its legislative directive, much the same position as its elder, the National Resources Planning Board, with its presidential directive.

The Postwar Division is instructed by its congressional dispensation to cooperate with the Resources Board—and reasonable cooperation is apparent. Of course, there hasn't been much time for competition to develop, and the Resources Board is temporarily handicapped by limited funds.

• **Board's Projects**—Luther Gulick, the Resources Board's principal postwar planner, is currently employed by Donald Nelson in x-raying WPB's administrative organization, but he devotes many early morning hours to projection of the board's systematic studies of our national resources—material and human—into the postwar period. An interesting phase is the board's pioneering job in long-range estimating of national income and output. Considerations affecting peacetime utilization of war plant capacity constitute another project of the Resources Board.

The board serves as a clearing house on the domestic front for research work by numerous public and private organizations, corporations, and individuals. Government agencies, incidentally, have no monopoly of postwar planning. This is significant as further indicating that the means for achieving postwar socioeconomic welfare will be sought within the pattern of the democratic system.

• **D. of A.'s Committee**—In the Department of Agriculture an Interbureau Committee headed by Roy I. Kimmel, is studying, among other things, the interacting relationship between land use and the new high diets and postwar exports.

In the Commerce Department the National Economics Unit headed by Arthur R. Upgren is trying to appraise the amount of private investment that will take place in early postwar years, the deferment of civilian demand, and such supplementary factors as produc-

tive capacity and stocks on hand at the close of the war. The department's Business Advisory Council is also exploring, by contact with private corporations, the field of postwar investment.

• **Others in the Picture**—The Treasury Department (with reference to fiscal and tax policies), the Department of Justice (with reference to freedom of competition), the Federal Works Agency, the Federal Security Agency, and many others will be drawn into plans for the rebuilding of the peace economy.

Postwar analysis and planning on the international front head up primarily in two agencies: the Board of Economic Warfare, from the economic standpoint; and the State Department, from both economic and political standpoints.

• **Seeds Sown in War**—In the international field especially the seeds of postwar policies are sown in wartime. Present lend-lease arrangements with the United Nations and export and import controls are certain to evolve into instruments of postwar world economic reconstruction.

In BEW, Louis Bean is exploring the postwar projection of its functions. In the State Department, a Division of Special Research headed by Leo Pasvolksky is taking its cue from the declarations of the Atlantic Charter and analyzing what they would entail in practice.

SUPER-SUPERMARKET

Two and a half acres of buildings and five acres of parking space make the Town and Country Market, latest Los Angeles super to open (Third St. and Fairfax Ave.), probably the largest to date.

Lessees have already taken the 26 enclosed shops and 75 open or semi-enclosed stalls.

Philadelphia's Plan

Postwar business problems of city are already the target of a concerted drive by industrial, labor, and other groups.

Postwar competition from newly-created manufacturing centers is the ghost at many a production banquet in old industrial cities. Plenty of the war-born communities are in cheap labor belts, close to raw material sources, and well-placed for grabbing markets. Recognizing the threat, Philadelphia has a plan in action.

• **Rich Man—Poor Man**—The Quaker City program came to full light late last month after a series of discussion panels in which topflight industrialists, bankers, and retailers exchanged ideas with labor leaders, little merchants, club ladies, welfare workers, and a host of average citizens.

Emphasis is being laid on ways to keep factory wheels turning, to maintain payrolls and purchasing power, and to cushion the shock of reconversion when normal times return. Boiled down, the idea is to keep Philadelphia from having the pins knocked out from under it, now that armament has given it rebirth (BW—Jan. 18 '41, p. 22).

• **Ways and Means**—Committees are already tackling the problems of reconversion. Their studies fall under such headings as the financing of reconversion programs, rehabilitation of industries that were unable to get war work, encouragement of industrial diversification, and retention of the city's army of skilled workers.



Mrs. Gustav Ketterer, president of Philadelphia Federation of Women's Clubs, Carl Bersing (standing), C.I.O. Council president, and John A. Ste-

venson, president of Penn Mutual Life Insurance, scan book of suggestions from which Philadelphia's War and Post-War Program was formed.

Special attention is also being paid to the application of war-learned mass production methods to peacetime processing, and to the development of new products through research. The city's competitive position as regards costs and profits is likewise under scrutiny. Philadelphians want to know why theirs was one of the first big cities hit by the depression and one of the last to come out of it.

• **An All-Out Campaign**—From these focal points the program branches out to include most of the problems of modern urban life. Industrial peace, the city government, civil servants, municipal finances, taxation methods, public services, and even the community's physical appearance are all subjects of possible reform.

In the realm of labor relations the first step will be immediate reestablishment of the panel system for handling disputes. The method, inaugurated through the Chamber of Commerce, went great guns from 1933 until 1935, handled 900 disputes without a single serious strike resulting, then was sidetracked by a change in policy of the city administration.

• **Favored by Unions**—The return of the system not only has the blessing of manufacturers but of unions as well. Carl Bersing, Philadelphia's C.I.O. council president, James L. McDewitt, local A.F.L. chieftain, and James P. Casey, rail brotherhood official, are reported to be united on the plan, which will set up a jury of ten unionists and ten business men under an impartial foreman to sift troubles.

Linked to this will be a study of expanded profit-sharing, better working conditions in old factories, and adequate labor housing. The housing problem itself is in for a complete going-over. The investigators will weigh suggestions for a tax moratorium on new home building, more adequate recreational facilities, and means to protect home owners.

• **New Broom**—This will involve prodding the city fathers in the matter of city planning and zoning, dead issues locally for years. Slum clearance and rehabilitation of the town's decaying water and sewage systems are part of the initial program. A revision in assessments, new tax schedules, and broadening of the tax base to lift the load off real estate are also deemed necessary.

Coping with postwar unemployment is, of course, of basic importance in such planning. In its broad aspects, this problem is beyond the control of Philadelphia or any other city, but national policy is already coming in for local discussion. One school of thought calls for sudden and complete demobilization when the war ends, to provide more customers and additional workers, in case a buying boom develops. Another school talks of staggered, gradual de-



BASKETBALLS TO BALLOONS

Expanding Goodyear Tire & Rubber Company's war production of barrage

balloons called for the conversion of a gymnasium into a balloon loft where assembly line work—fitting and cementing fabric—is done by women.

mobilization to enable industry to absorb the men mustered out.

• **Beyond the Talk Stage**—Philadelphia's program has progressed beyond the talk stage. About 1,000 business men are currently going about the city collecting \$300,000 to finance the effort.

The drive, credited to the Chamber of Commerce, received its impetus from a series of 31 discussions. Thousands of suggestions were evoked at the meetings, and thousands more were brought in by a mailed questionnaire. The suggestions spared no one, and many Philadelphians are inclined to believe that—even if the program should fail—the resultant development of self-criticism, cooperation, and community spirit may provide a needed shot in the arm.

Safety War Chest

Drive for \$5,000,000 to be used in preventing accidents and conserving manpower will hit its full stride this month.

Campaign machinery for the raising of a \$5,000,000 war chest "for the prevention of accidents and the conservation of manpower for war production" is scheduled to go into high gear this month.

• **Last Year's Toll**—Though last year was the first in the last decade when no single catastrophe took as many as 100

lives (a Brooklyn ship and pier fire topped the list with 37 fatalities), 1941 accidents of all kinds killed 102,500, injured 9,300,000—5,600 more deaths than the 1940 toll and about 200,000 more injuries.

Lives lost in occupational accidents totaled 18,000 (1,000 more than the 1940 record), and an additional 32,000 were killed in off-the-job accidents—at home, in the family car, etc.—a total irrecoverable loss of manpower statistically capable of building hundreds of destroyers or thousands of heavy bombers.

• **Presidential Action**—Long before the end of the year, President Roosevelt foresaw the inevitable correlation between the accident rate and the rapidly accelerating employment of inexperienced manpower for military production. The problem was to do something immediately to safeguard lives and limbs by means of education, foolproof machinery guards, and all the varied techniques of accident prevention.

On Aug. 18, the President signed a proclamation calling "upon the officers and directors of the National Safety Council to mobilize its nation-wide resources in leading a concerted and intensified campaign against accidents, and . . . upon every citizen, in public or private capacity, to enlist in this campaign and do his part in preventing wastage of human and material resources of the Nation through accidents."

• **Program Launched**—Each of the 138 members of the Council's Chicago head-

quarters staff went into immediate action, and with them the staffs of 250 regional safety councils in many parts of the country. Plans were laid for the establishment of new safety councils in the 66 cities of over 50,000 population now lacking them, for additional regional conferences, for a nation-wide educational program through magazines, newspapers, motion pictures, and the radio air channels.

N.S.C. is a nonprofit cooperative association which started in 1913 with five members and a budget of \$1,400. It now has a membership of 5,500 industrial concerns, insurance companies, other firms, associations, government departments, and individuals. Members contribute an average of about \$75 each into a budget of nearly \$1,000,000. More than half of the budget is raised by sales of safety literature, plant posters, and the like.

Shortly after the turn of the year it became apparent that the normally adequate resources of the council would not keep pace with the accident hazards of accelerated war production. Much as they might like to do it, patriotically, the 5,500 members could not be expected to carry the ball financially for 196,000 industrial plants and their workers communities.

● **Fund Established**—Upshot was the establishment of the "War Production Fund to Conserve Manpower," a move which had the full approval of the President and WPB's Donald Nelson. The fund is under the national chairmanship of William A. Irvin, former president of U. S. Steel. Early in the spring, Mr. Irvin set up headquarters on the fourth floor of U. S. Steel's office building in New York and drafted a national committee of 700 top-flight business men. Senior executives of more than 50 of the largest corporations accepted responsibility for the fund's leadership through membership on its executive committee.

From the executive committee stems the new \$5,000,000 budget, based on the expectation that companies will contribute 1% of their 1941 earnings. There is a group of 75 commerce and industry committees—such as heavy machinery, heating and plumbing, chemicals, railroads—for obtaining contributions from individual companies in the various fields. A publicity cooperation committee includes more than a dozen newspaper, major magazine, motion picture, and radio executives plus an experienced headquarters staff to push the campaign.

● **Signing Up**—Eighteen companies have already signed up, on the basis of 1% or more, among them: Climax Molybdenum, \$10,000; Bethlehem Steel, \$45,000; American Tel and Tel, \$65,000; U. S. Steel subsidiaries, \$150,000. To speed the drive, governors of most of the 48 states have agreed to issue War

Production Fund proclamations patterned after the President's.

Detailed plans for the expenditure of the \$5,000,000 fund over a two-year period cover 14 closely typewritten, letter-size pages. These call for such major items as \$400,000 for technical assistance in organizing and reorganizing plant safety programs; \$400,000 for special research looking to the safe handling of explosives, machines, chemicals, etc., and to the development of more efficient safety guards and equipment; \$300,000 for the production and distribution of educational motion picture films; \$500,000 for safety literature for workers; \$300,000 for radio broadcasts. Since off-the-job accidents bulk larger than occupational accidents, more thousands will be spent on their prevention than in industry.

● **Accident Causes**—Up to now, no one can say precisely how many industrial accidents are due to particular causes. According to figures summarized by the council from the reports of eleven state compensation commissions, "handling objects" ranks first as an accident hazard, causes more accidents than "falls," but results in the payment of less compensation. Next in order come accidents caused by machinery, vehicles, falling objects, hand tools, "stepping or striking against."

Fatal home accidents follow pretty much the same pattern year after year. Over half of them are falls and a sixth "burns, scalds, or explosions." Other types—such as poisons, firearms, mechanical suffocation, and poisonous gas—account for less than 4% each. Whatever the accident, the National Safety Coun-

cil is planning to secure a sounder statistical background than ever with the money to be raised by the War Production Fund.

Women's Factory

Republic Drill & Tool Co. has adapted plant processes and redesigned its machines to fit feminine requirements.

New light on the problem of using more women in factory jobs (BW—May 16'42, p20) may be had from the experience of Republic Drill & Tool Co., Chicago, which employs 82% women, and has had such excellent success that it is planning to hire 500 more women this summer, increasing the ratio to around 90 percent.

When this factory was in the planning stage last year, management saw the handwriting on the wall and designed its plant to start up with women operators instead of depending on a then adequate supply of men.

● **Machines for Women**—Where Republic's provision for women workers differs especially from that of ordinary American plants is in the machine design, an idea that Clarence Avildsen, chairman of the board, picked up in a British saw-blade factory. Every machine in the plant, except for the male jobs of heavy roughing, machine shop, and heat-treating, was selected, adapted, or specifically equipped for use by women operators.



PAPER "CANS"

To comply with war restrictions that eliminated all the tin and half of the steel for paint containers, Sherwin-Williams Co., Cleveland, has begun production of a paper-bodied paint can. The new containers are lined with parchment paper to protect pig-

ments. The sides are impregnated with a special insoluble substance to prevent the paper from absorbing the oils and solvents in paint. Metal ends are of lead coated sheeting but will soon be changed to lacquered iron. A new label carries the postscript: War Emergency Container—Handle With Care.

Switch to NE Alloy Steels

to Save Critical Metals

TO HELP conserve nickel, chromium, vanadium and other scarce metals, the War Production Board's ablest metallurgists have developed NE (National Emergency) Alloy Steels. These new steels contain relatively small quantities of alloying elements in such combination as to produce physical properties usually attributed to steels of much higher

alloy content. The War Production Board stipulates the use of the new NE Alloys to replace the standard SAE and AISI Alloy Steels for a wide range of applications.

Ryerson NE Alloy Steel stocks in six specifications, all fine grain, will be available shortly; and will consist of sizes ranging from ½-inch to 7-inch rounds, in three groups:

Carburizing Grades

NE 4023 and NE 8620.

To Replace AISI and SAE

Nos. A 2300, A 2500, A 3100,
A 4100, A 4600, A 5100, A 6100.

Medium Hardening Grades

NE 4042 and NE 8744.

To Replace AISI and SAE

Nos. A 2330-35, A 3130-35,
A 4130-35, A 5130-35, A 6130-35.

High Hardening Grades

NE 4047 and NE 8749.

To Replace AISI and SAE

Nos. A 2300, A 3100, A 3200;
A 4100, A 4600, A 6100.

Only limited data on heat-treatment response or physical properties will be available when NE Alloys are first ready for shipment. The WPB is anxious to know how these new steels will function and requests all NE Alloy users to report results in working with these new steels. Ryerson will cooperate fully with

users, supplying laboratory test data, and all other available information.

If you now use Alloy steel, let Ryerson help you in adapting NE Alloys to your requirements wherever possible. Write, wire or phone the nearest of the ten Ryerson plants.

JOSEPH T. RYERSON & SON, Inc., Chicago, Milwaukee, St. Louis,
Cincinnati, Detroit, Cleveland, Buffalo, Boston, Philadelphia, Jersey City

RYERSON STEEL-SERVICE

Objectives sought in machine design for this purpose are: (1) easy operation; (2) seated position for operator; (3) minimum skill requirement; (4) clean operation; (5) safety.

• **For Example**—Putting points on twist drills is traditionally a male job. Formerly done by hand, it required strong fingers and steady hands to assure an accurate point. Republic's engineers outfitted the drill-grinding machines with ball-bearing slides for ease of operation, and specified a type of chuck which holds and guides the drill point against the grinding wheel at the required angle. By eliminating most of the need for skill, this chuck reduces training time from a year to two weeks.

Another tool that formerly required male operators was a special spinning lathe. A new lever reduced the strength requirement by about 70%, bringing it well within the female range.

• **Fingers Spared**—Before Republic engineers tackled the problem, operating a clearance grinder required inserting the drill and pulling it through and out of the machine by hand. This was hard on the fingers, but men had always accepted this as a mere inconvenience. Women operators balked at it, not only for the discomfort but also because it reddens the hands. Now a foot-operated pusher handles the entire operation. The girl merely guides it along and catches the drill as it comes out.

Women operators have proved themselves more apprehensive of accidental injury with its threat to looks than are men. Likewise, they are less inclined to accept occupational discomforts. Hence, Republic has found that it pays to recognize this emotional bent.

• **Plastic Surgery**—The company agrees to employ a plastic surgeon for any girl operator who might need his services as a result of any possible plant accident. Also, the plant does an extra-special job of guarding machinery where it might conceivably catch hands or clothing, and of housing any operations where coolant normally splashes on the operator.

Clearance grinding was always avoided by women because it was messy, but now they are guarded against being splattered. Moreover, the footing was made drier by extending the base pans of the machines and placing wooden grills over them.

• **Other Measures**—Drill straightening, formerly characterized by hot pieces of metal flying about, was made acceptable to women by encasing the arbor press in a metal guard, with a safety-glass window through which the operator watches the operation. Similarly, abrasive cut-off machines are guarded with safety glass and metal to protect hands from the wheel.

Operating a centerless grinder has been made easier by attaching a magazine feed. This eliminates hand-feeding, so that now women learn to operate the machine after only a month's training. It makes the operation safer and also in-



SOLDERING SPEEDER

Rheostat plates for General Electric motor and generator controls used to be assembled manually with solder and soldering iron. Now they are laid in a grounded ratchet fixture. The operator rotates the plates by foot lever, heating each rheostat button in turn with an electrically-powered carbon tip, ready for its quota of solder.

creases production. Three to four months suffices to teach the girls how to set up the machine for production. The grinders are also equipped with special guards to ease feminine forebodings of disfigurement.

• **Fatigue Reduced**—Simplification of operations, besides increasing production, has reduced fatigue of operators. For instance, a special multiple-spindle milling machine turns out five drills at a time, instead of only one. This machine eliminates considerable walking around. One girl can operate four of these machines at a time, taking only a few steps from one to the others.

Another Republic method of whitening a job down for women is reducing its weight. Its tote pans, for instance, are smaller.

Women employees are understandably reluctant to take jobs on the night shift because of fear of traveling around town in the small hours. To overcome this difficulty, Republic gets city police to escort each shift in groups to and from nearest street car and bus stops.

CORRECTION

John Morell & Co., calls attention to the fact that one container of their new dehydrated Red Heart dog food is equivalent in food value to 2½ cans of the old canned Red Heart—not to one can, as stated incorrectly in Business Week's issue of May 30, 1942.

Expediting Planes

Aircraft Council on West Coast, made up of eight leading concerns, exchanges men, plans, materials to speed schedules.

Heads of the eight major plane manufacturing companies in Southern California met this week in the headquarters of their Aircraft War Production Council in Los Angeles to draft a July 4 statement to employees. Primarily the message was to congratulate the workers on their part in making possible President Roosevelt's declaration that airplane production in May was close to 4,000 units and Donald Nelson's prediction that the June output would reach 5,000.

• **And Still More Speed**—At the same meeting, the eight executives who (with Boeing in Seattle) are responsible for about 60% of the bombers, fighters, trainers, and cargo planes currently being produced, discussed ways and means of increasing production, particularly through more intensive use of their pooling setup, the Aircraft War Production Council.

Present at the confab were Harry Woodhead (Consolidated), Donald W. Douglas (Douglas Aircraft), Robert E. Gross (Lockheed), J. H. Kindelberger (North American), La Motte T. Cohn (Northrup), T. Claude Ryan (Ryan), Courtland Gross (Vega), and Richard Millar (Vultee). Last April they established, on a formal and working basis, an activity that had been going on in a haphazard fashion for several months—a pooling of facilities and information for the purpose of speeding production.

• **Key Policies**—The arrangement works because (1) it is actually run by the eight top executives who formed it, and (2) the engineers, production managers, and department heads of the eight companies have been given complete authority to reveal any detail of policy or operation requested through the council or to help any member company solve any problem of supply or technique that might interrupt production.

The governing policy was drawn up by the eight directors last April in these words: "Members of the council's advisory committees (the directors' employees) shall be free to interchange all information, which will help the war production of the company receiving the information, without regard to protection of manufacturing processes which in normal peace times might be regarded as secret. This information shall be available not only to members of the Council, but to manufacturers and government agencies outside of the Council."

• **Loan Materials**—As of July 1, there had been some 450 instances in which



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YOU MIGHT THINK that to be ideally located from the standpoint of receiving service on your life insurance, you should live in the shadow of one of Metropolitan's principal offices. These are . . . the Home Office in New York City, the Pacific Coast Head Office in San Francisco, and the Canadian Head Office in Ottawa.

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This is done through the life insurance agent, a man who is acquainted with you, understands your problems, knows your circumstances, and is therefore able to help render you the kind of service you should have.

Metropolitan agents receive continu-

ous training in how to help you select the kind of life insurance that best fits your needs. Moreover, through the agent you have access to the counsel and advice of Home Office experts. In fact, Metropolitan maintains, at the Home Office, a number of departments especially equipped to assist the agent in keeping your life insurance program fitted to your needs.

Your Metropolitan agent is always ready to help you solve your life insurance problems, and to give you the benefit of his training and experience.

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P. S. You can buy War Savings Stamps from him too, or from any Metropolitan office.

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Metropolitan Life Insurance Company (A MUTUAL COMPANY)

Frederick H. Ecker, CHAIRMAN OF THE BOARD • Leroy A. Lincoln, PRESIDENT

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a member firm, temporarily short of a particular kind of material, had borrowed enough from another member to enable production to continue without interruption. These transactions were without cost (even handling cost) to the borrower. Only stipulation was that a similar amount of material be returned by the borrower when it become available.

When a company building a new twin-engine bomber recently faced delays pending experiments with landing gear, another member of the council sent over its proved data, complete with blueprints of its successful gear. Another company passed on to members all its findings from extensive research on zinc chromate caulking, along with data on tests of turnbuckle compression, bending of aluminum alloy, welds, windshields, shearing, vibration, spars, and torsion.

• **Specialists Loaned**—When a firm recently ran into a tough problem in the manufacture of dive flaps for bombers, another member supplied engineering research studies on the subject which had cost something like \$250,000. Vultec recently loaned a group of specialists to Vega, in an emergency, to help the company over a particular hurdle and enable it to meet a production schedule.

Northrup, which has made a complete study of accident prevention for women employees, furnished all council members with a copy of its report and the safety rules for women that grew out of it.

• **Committees Guide Work**—Eight functional committees work on specific problems. They cover the fields of production, materiel, engineering and standards, transportation and housing, accounting, plant defense, industrial and public relations, and industrial training (the last only now being formed). These committees are made up of specialists from the participating companies.

Acting as a clearing house and coordinating agency is the council, with headquarters at 7046 Hollywood Boulevard, Los Angeles.

• **How Committees Work**—The production committee, for instance, has developed procedure for standardized listings of machine capacity and load. As this information is interchanged, all companies know what machine capacity is available in the region. When one company does work for another, the rule is "no profit." The same committee pools data on tooling and manufacturing processes generally, sending subcommittees of technicians into each plant.

A catalog method of exchanging engineering reports has been set up through the council by the engineering committee which breaks big problems into small sectors, assigns a research sector to each company, and thus saves time-wasting duplication of effort. All in all, more than 1,000 reports have been exchanged.

Towboat Heyday

Petroleum crisis gives an added boost to record traffic to rivers. Barge lines' big beef is that it's mainly upstream.

In war or peace, good times or bad, the rivers of America have their devoted partisans who clamor persistently for greater use of towboat and barge. Today, with the nation's transportation system strained as never before, the clamor is louder than ever. And the devoted partisans, gaining new adherents under the obvious urgencies of the fuel crisis, are able to point to a record-breaking job that is already being done by the inland waterways.

• **Statistical Evidence**—Freight tonnage on the rivers has increased so steadily in recent years (BW-Aug. 9 '41, p. 31) that the navigable stream which lacks statistical evidence of its contribution to the war effort is, for all practical purposes, an unreported rarity. Keeping score on inland waterway traffic is, however, a snail's pace job. Final figures on the 1941 showing are not yet available, but the War Department's Board of Engineers for Rivers and Harbors of-

fers the following "preliminary" figures for some of the key segments of the Ohio and Mississippi systems:

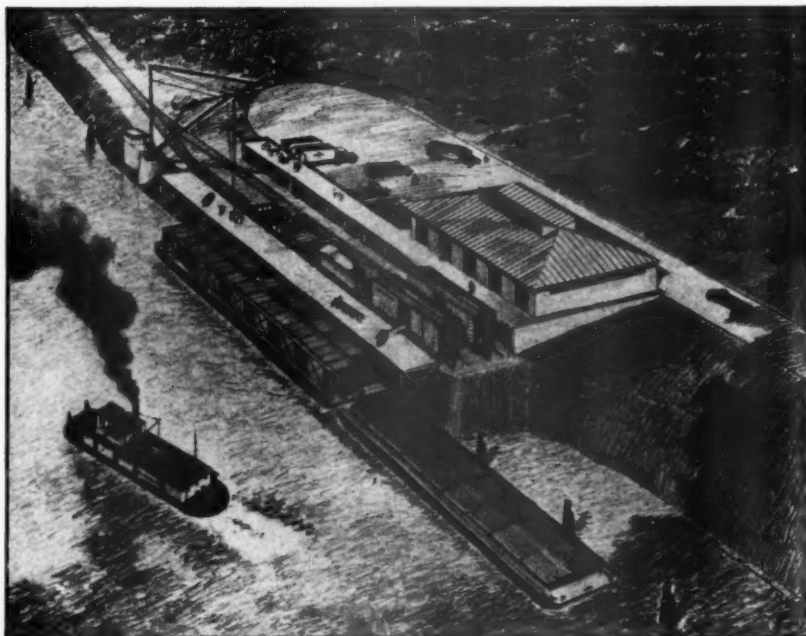
	Total Short	% of Gain or Loss
Monongahela	31,357,275	+ 6
Allegheny	3,287,075	-16
Ohio	36,555,414	+24
Upper Mississippi..	4,501,144	+29
Lower Mississippi..	31,852,735	+10

• **Petroleum's Upsurge**—In view of the present drive for increased movement of oil and gasoline by inland water routes, it is significant that river shipments of petroleum products were already registering sensational gains in 1941.

On the Ohio River, the traffic in petroleum products shot up to 5,564,631 tons as against 3,997,290 tons in 1940, a gain of 39%.

On the Lower Mississippi (from the Passes at the Gulf to the mouth of the Missouri), petroleum products carried in 1941 totaled 18,652,838 tons as against 15,354,027 tons in 1940, a gain of 21%.

• **Coal Still Leads**—Coal (25,677,604 tons on the Monongahela and 18,400,872 tons on the Ohio in 1941) continues to be the No. 1 item of river tonnage. Unlike the petroleum tonnage, the wartime movement of coal on the rivers does not, generally speaking, represent any substantial diversion from



REDESIGN

Originally planned for all-steel construction, four river-rail public freight terminals to be built by TVA have been redesigned to reflect wartime conditions. Docks will be of timber instead of the sheet steel originally specified. Stiff-leg derricks, made principally of heavy timbers, will be sub-

stituted for all-metal gantry cranes, and dock houses will be of cinder blocks with timber trusses instead of galvanized sheet iron over steel framing. To be located at Knoxville and Chattanooga, Tenn., and Guntersville and Decatur, Ala., the new terminals will serve a wide inland area comprising important areas of eight southern states.

**American Production is Speeding the Day of Victory—
and Century Electric Motors Aid Production**



Photo by
U. S. Army
Signal Corps.

CENTURY MOTORS ARE AS TOUGH AS THE LAND BATTLESHIPS THEY HELP TO PRODUCE

*They Withstand the Terrific Shock Loads and
Power Demands of the Heaviest Machine Tools*

★ The rugged construction of Century Motors, including ribbed frame and braced end brackets, provides the rigidity with which to withstand the heavy shock loads of forming, forging, shaping, and shearing heavy plates and other heavy parts used in armament production.

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A wide variety of sizes and types of Century Motors — those with standard general purpose characteristics and also those with special speed torque characteristics — are found on machine tools ranging from those heavy brutes forming the heaviest armor to those delicate machines producing the finest precision instruments.

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One of the Largest Exclusive Motor and Generator Manufacturers in the World



Somewhere a torpedo is launched on a journey that started thousands of miles back home in America . . . where raw materials are assembled and rushed by train to factories . . . where busy workers are making this and thousands of other weapons . . . where railroads speed the finished fighting machines to ports.

In the months to come, as American production of war materials breaks all world records, the transportation job will grow steadily bigger. The railroads will be called on to move the greatest volume of freight in history. This job will require the utmost efficiency of railroad management and men, and complete cooperation between the railroads, shippers and receivers, and government.

Today, most rail transportation in America is for war. Any shipment may contain the raw materials for, or the essential parts of torpedoes, guns, tanks or planes. Hence, every shipment must be addressed properly . . . every car must be loaded to capacity quickly, and moved swiftly to destination. Every car must be unloaded promptly and released immediately. Every minute must be saved. These things are vital to Victory!

**Norfolk
and Western
Railway**

PRECISION TRANSPORTATION
CORP. 1942 N. W. R. Y.

other transportation routes.

More coal is being carried than ever before, but the increase is mainly accounted for by the stepped-up demands of communities and industries already accustomed to getting their coal by barge. No major shift affecting river coal traffic is yet in sight as a result of the current diversion of cargo coal from the Great Lakes (BW—May 16 '42, p17).

• **Out of Balance**—While enthusiasts talk confidently of the way the barge lines will handle an all-time record tonnage this year, it is not true, as sometimes claimed, that the inland waterway system is a transportation medium "without wartime headaches." One big headache for the barge operators right now is that traffic on both the Ohio and Mississippi is badly out of balance. There is tonnage no end for the up-river hauls while barge space goes begging on the downriver trips.

One Pittsburgh barge operator recently complained that downstream tonnage had dwindled to "practically nothing." "We can fill every barge coming north," he said, "and that's the hard push."

• **Complaints to Washington**—Agitation for correction of this "back-breaking" reversal of the normal flow of traffic is under way. The Mississippi Valley Assn. contends that steps can be taken to increase the downriver loads, and that the war effort can thus be best served. Pittsburgh barge operators and other river interests have taken their protests to Congress and the Office of Defense Transportation.

In part, the shrinkage of downriver business is due to the dwindling of exports through the port of New Orleans (BW—Aug. 9 '41, p32), but the barge people put most of the blame on the government's insistence that certain war materials move by rail. They point out, for instance, that huge quantities of steel are being moved by rail to Gulf shipyards. River shipment of this steel, so the argument goes, would relieve both the barge lines and railroads.

• **Nonwar Shrinkage**—Another factor, of course, is the effect of priorities and freeze orders on nonwar business. For example, steel which formerly found its way into civilian products transported downriver by barge is now quite understandably going elsewhere.

That is not the only experience the barge lines have had with priorities. Like other transportation companies, they have had to worry about the problem of new equipment. And the availability of materials for such equipment will be the determining factor in the part played by the river lines in combatting the submarine threat to our important coastwise tanker service.

• **Barge-Building**—In view of the Senate's \$20,000,000 barge program, the wooden barge bids received this month

by the Maritime Commission, and the recent announcement that a barge program was being worked out by ODT, it is interesting to note some of the additions that have been made to the barge fleet within the last year. At Pittsburgh, Dravo Corp. has completed 24 oil barges since Sept. 1, 1941. The company has six more under construction, each of which has a capacity of 10,000 bbl. In the same period Dravo has also built 30 coal barges.

American Bridge Co. (U. S. Steel subsidiary) launched four barges a week during the 13-week period ended June 1, completing an order for 60 all-welded coal barges of 1,000 net tons capacity. Neither American Bridge nor Dravo has been working at anything like capacity; they have merely been filling orders which come to them.

• **Barge Capacities**—The average railroad tank car carries about 9,000 gal. The average barge carries about 336,000 gal. A 420,000-gal. barge was launched at Nashville, Tenn., recently, to be floated down the Cumberland, Ohio, and Mississippi rivers for Intercoastal Canal (BW—Apr. 11 '42, p18) service between Texas and Louisiana ports. Capacities of some tank barges are reported to run as high as 600,000 gal. Tows of barges, pushed by diesel or steam power often carry the equivalent to 240 rail tank cars per trip.

Last spring an oil industry committee's survey showed 844 steel barges in petroleum service, accounting for a total capacity of 6,395,538 bbl., while some 80 barges were being built to add another 754,000 bbl.

• **Others Convertible**—It was also found that 727 other steel barges were suitable for conversion for transport of petroleum. The catch, however, was pointed out by National Petroleum News:

"The large carrying capacity of the barge fleet is liable to be misleading unless it is remembered that the waterway distance from Pittsburgh to Port Arthur, Tex., is 2,246 miles, and that the turn-around time is 47 days."

Heavy thinking and learned discussion of the feasibility of using wooden barges for gasoline makes old timers in the river trade a bit testy. "Of course they can use 'em," is their verdict. "They've been used before."

• **Twin Cities' Problem**—One part of the country that is acutely conscious of its dependence on barge transportation for fuel is the Twin Cities area. A program is being pushed locally whereby use of existing pipeline facilities would be stepped up to give these cities their total gasoline requirement while the river would be used to bring in all their fuel oil (412,000,000 gal. last year). To insure the fuel oil requirement, it is proposed that the Upper Mississippi navigation season, which traditionally closes Nov. 1, be extended to Dec. 31.



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For Better Eating

Health for Victory clubs, developed by Westinghouse, are offered to other war plants. Utilities urged to push them.

The government's national nutrition program was officially born just over a year ago. In the past twelve months there has rolled up in its wake a host of private schemes for making the United States food conscious. One of the newest of these is the Westinghouse Health for Victory clubs program which is getting into full swing this month.

• **The Plan's Strength**—Standout points about the Westinghouse campaign are these: (1) it is aimed, specifically, at improving the diet of war workers; (2) it stresses the importance of careful food preparation as well as careful food selection; (3) it provides a job for Westinghouse appliance salesmen; (4) it gives local utilities to whom Westinghouse can no longer furnish a complete line of appliances a ready-made means of building consumer goodwill.

Utility home economists sponsor monthly nutrition meetings and Health for Victory clubs for the wives of local war plant workers. Westinghouse provides a complete program for each meeting and a word-for-word guide for the home economist. At each meeting, housewives receive a copy of the meal-planning guide for the month, made up by the Westinghouse Home Economics Institute.

• **Helpful Hints**—The guide contains balanced recipes and menus for every meal of the month (including box lunches) plus such assorted helps as a vegetable cooking chart, instructions on storing foods in refrigerators, various household hints.

Menus are built around a food budget of \$14 a week for a family of five. They take sugar rationing into account, vary with the seasons, plug fresh (rather than canned) fruits and vegetables. Cooking instructions are given in full for gas, wood, coal, and oil, as well as electric stoves. Westinghouse appliances are not mentioned anywhere.

• **Tried at Mansfield**—The program has undergone three months' pretesting at the Westinghouse Mansfield (Ohio) plant. This month it is being introduced in other Westinghouse factories and offered to utilities and war plants generally. Westinghouse urges utility companies to take on the job of selling other war plants.

Westinghouse appliance salesmen, after three days' training at Mansfield, are now being sent out to sell the plan to utilities, help the utilities sell war plants. Costs of each series of meetings are divvied up among Westing-

house, the utility, and the war plant. • **Everyone Benefits**—For Westinghouse, the utilities, and cooperating war plants it is expected to mean improved employee and consumer relations. For Westinghouse and the utilities it should help build the postwar market for modern cooking appliances.

UNION'S RESEARCH BONUS

A bonus for each researcher on every patent developed in the laboratories of the Shell Development Co. is one of the interesting features of the significant contract newly signed in San Francisco by the Shell Oil Co. subsidiary and The C.I.O. Federation of Architects, Engineers, Chemists and Technicians.

Under terms of the agreement, \$50 will be deposited by the company in a general fund every time a patent is taken out on a process or product developed in the laboratories. On April 1 each year the accumulated cash will be divided equally among the 500 employees.

Another innovation is the establishment of an orderly procedure to settle disputes between the company and its researchers over who owns patents on processes or products developed on employees' own time. These issues will be handled by a committee representing all parties to the dispute with an outside arbitrator holding the balance of power.

Incidentally, the F.A.E.C.T. was recognized as sole bargaining agent for the Shell technicians and a maintenance of membership clause was included.



CARRIER'S NEW PRESIDENT

Cloud Wampler, who three years ago resigned from the Chicago investment house of Stern, Wampler & Co. to become executive vice-president of Carrier Corp., manufacturers of air-conditioning equipment, is the firm's new president, succeeding the late J. Irving Lyle.

A Guide to Rents

Here are some important questions and answers having to do with OPA's enforcement of ceilings in defense areas.

Over 300 "defense-rental areas" which were designated early in May (BW—May 9'42,p50) became liable to federal rent control July 1 when the 60-day period allowed by law to landlords and local officials for voluntary compliance with ceiling regulations expired. But the congressional threat to cut OPA's funds for next fiscal year by almost half raised a question as to whether any effective policing could be carried out.

• **Enforcement Efforts**—In the 20 areas designated on Mar. 2 (BW—Mar.7'42, p17) the grace period expired May 1. Subsequent OPA investigation disclosed that "in no one of the areas have regulations been complied with," and on June 1 a rent director was installed in each area with full authority to enforce the order. Landlords had to file separate registration statements for each dwelling unit under their control by July 1, and failure to register or falsification of facts on the registration form made the offender subject to a maximum fine of \$5,000 and imprisonment for one year.

Since one of the main reasons for noncompliance to date has probably been the very general language in which the original order was couched, OPA has issued clarifying statements on many obscure points. The more important of these can be summarized in question and answer form as follows:

• **To what types of buildings do the regulations not apply?**—Buildings used solely for commercial or industrial purposes are exempt. A house or room situated on a farm and occupied by a tenant working on that farm is exempt. In a building in which the ground floor is occupied by a store and the upper stories are dwellings, the store is exempt but the living quarters are not.

• **If the rental today is higher than that charged on the ceiling date, what happens?**—The rent must be immediately reduced to that charged on the ceiling date. This is the case even if the present tenant moved in since the ceiling date and has always paid the higher rate. However, the tenant is not entitled to a rebate on the higher rental which he paid up to June 1.

• **Can the ceiling ever be changed?**—Yes. If the landlord has made substantial alterations and improvements in the property since the ceiling date, he may apply to the Rent Director to have the ceiling raised. If the landlord fails to make normal repairs and the premises deteriorate as a result, the tenant may apply to the director to have the ceiling lowered.



"AND DON'T FORGET!

PHILLIPS SCREWS COST LESS TO USE!"

Faster Driving • Less Effort • Better Work = 50% Less Assembly Cost with Phillips Screws

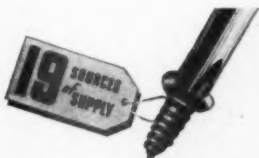
It seems reasonable to expect more production and better work from a man who doesn't have to sweat and strain (and curse) in order to drive a screw.

Plants which have switched over to Phillips Recessed Head Screws do find that quantity and quality both respond nicely to the change. The Phillips Screw clings to the driver, transmits driving power more efficiently, prevents screw-driver slippage, drives straight automatically and doesn't chew up when you start to drive it home. On top of that, it is more often practical to use electric or pneumatic drivers.

With so many nuisances and strength-wasters eliminated, operators do better work, even in awkward positions or even if inexperienced. Where accuracy is important, it is easier for them to line the job up right — seat the screws securely — and avoid costly rejects.

So keep your men cool as cucumbers with Phillips. Meanwhile, you'll be pleased as Punch to find that assembly costs are cut in half as a result of Phillips Screws.

Any of the Phillips Recessed Head Screw manufacturers listed below can furnish screws and facts.



PHILLIPS RECESSED HEAD SCREWS

GIVE YOU *2 for 1* (SPEED AT LOWER COST)

WOOD SCREWS • MACHINE SCREWS • SHEET METAL SCREWS • STOVE BOLTS • SPECIAL THREAD-CUTTING SCREWS
• SCREWS WITH LOCK WASHERS

American Screw Co., Providence, R. I.
The Bristol Co., Waterbury, Conn.
Central Screw Co., Chicago, Ill.
Chandler Products Corp., Cleveland, Ohio
Continental Screw Co., New Bedford, Mass.
The Corbin Screw Corp., New Britain, Conn.
International Screw Co., Detroit, Mich.
The Lamson & Sessions Co., Cleveland, Ohio
The National Screw & Mfg. Co., Cleveland, Ohio

New England Screw Co., Keene, N.H.
The Charles Parker Co., Meriden, Conn.
Parker-Kalen Corp., New York, N.Y.
Pawtucket Screw Co., Pawtucket, R.I.
Phenol Manufacturing Co., Chicago, Ill.
Russell, Burdall & Ward Bolt & Nut Co., Port Chester, N.Y.
Scovill Manufacturing Co., Waterbury, Conn.
Shakeproof Inc., Chicago, Ill.
The Southington Hardware Mfg. Co., Southington, Conn.
Whitney Screw Corp., Nashua, N.H.

In the case of a long-term lease which was signed several years ago under different economic conditions, and which was in effect on the ceiling date, either party to the lease may apply for a revision in rent, but only at the expiration of the lease. In the case of a dwelling for which the rent customarily fluctuates from season to season, the director may set different ceilings for different seasons.

• **What about services?**—All services (such as hot water, janitor service, elevator service, periodic painting) which were provided on the ceiling date must be continued by the landlord.

A reduction in services calls for a comparable reduction in rent for the tenant.

• **If the lease calls for a lower rent than that charged on the ceiling date, can the landlord raise the rent to the ceiling?**—

No, not during the life of the present lease. After its expiration, however, the landlord may charge up to the ceiling in any subsequent lease.

• **What are the rules governing evictions?**—Generally speaking, evictions are ruled out except for specified causes. At the expiration of a lease, the tenant can continue to occupy the quarters as long as he continues to pay rent, and if he is willing to renew his lease at the re-

WAR BUSINESS CHECKLIST

Washington's Significant Orders on Materials and Prices

• **Rerating Orders**—A new series of high preference ratings has been established by regulation No. 12. The new series—AAA, AA-1, AA-2, etc., will take precedence over the present A-1 series. The AA rating is abolished and all outstanding AA ratings are automatically changed to AA-2. Object of the rerating is to permit greater flexibility in assignment of ratings to definite quantities of military and related nonmilitary items now rated AA or in A-1 series.

• **PRP Compulsory**—Continuous audit of the operations of metal-using manufacturers was inaugurated July 1 by WPB's Compliance Branch in conjunction with compulsory application of the Production Requirements Plan to all manufacturing users of metals in excess of \$5,000 per calendar quarter. Some 9,000 companies which previously elected to take advantage of PRP will be checked over first.

Priorities Regulation No. 11, under which PRP becomes mandatory, has been amended to permit companies which have not yet received a PRP certificate but filed their applications before July 1 to receive deliveries and apply preference ratings within certain limitations.

• **Building Materials**—Many slow-moving critical materials are released from restrictions imposed by Suppliers' Inventory Limitation Order (L-63) under the terms of Exemption No. 5. Dealers holding stocks of such materials need no longer include them in records and reports called for by L-63.

Repainting and redecorating without specific WPB authorization are permitted under Conservation Order L-41 when they constitute maintenance or repair.

• **Utility Extensions**—Extension of services such as electricity, gas, and water to war housing projects are assigned the same preference rating as the projects themselves (amendment to P-46).

• **Truck Trailers**—Production of commercial types, having a load carrying capacity of 10,000 lb. or more, for nonmilitary use has been ordered to stop, effective July 1.

• **Refrigeration**—Amendment of Limita-

tion Order L-38 removes the restriction that industrial and commercial refrigerator and air-conditioning equipment can be sold only on an A-9 or higher preference rating.

• **Machine Tools**—Blanket preference rating of A-1-A is assigned to machine tool orders of certain Canadian purchasers by general preference order E-1-C.

• **Nickel Scrap**—Order M-6-C has been amended to make it conform to the new alloy steels scrap segregation order (M-24-C).

• **Copper**—Amendment to Conservation Order M-9-C permits use of zippers, snappers, and other copper and brass clothing findings, though none may be manufactured.

• **Canned Beef**—All stocks of the imported product over 5,000 lb. in this country are frozen for a period of 90 days from June 22 and made available to the armed forces (Order M-172). All stocks in transit from abroad must be set aside upon arrival (unless imported under General Imports Order M-63).

• **Canning**—To enable fruit and vegetable packers to prepare for increased operations, Preference Rating Order P-115 has been amended to raise the preference rating for repairs, maintenance, and operation from A-3 to A-1-J, and the preference rating on materials for replacement, addition, and expansion from A-3 to A-1-C on application to WPB.

• **Apricots**—Permitted civilian pack for 1942 is reduced from 75% to 65% of the 1940 pack by amendment No. 3 to Conservation Order M-81.

• **Cocoa Beans**—A 14% reduction from the present quota that may be processed has been ordered for the quarter beginning July 1 (Supplementary Order M-145-B).

• **Ceiling on Services**—Maximum Price Regulation No. 165, applicable to all retail consumer services rendered in connection with commodities, set the ceiling, at the highest prices charged last March by each individual seller,

• **Taxes**—Amendment No. 7 to General Maximum Price Regulation provides that a seller is required to absorb a tax only if, during March, he paid the tax and did not pass it on when reselling the article. A seller who absorbed a tax in March is permitted to pass on an increase in a tax effective after March provided that the amount of increase is separately stated from the selling price and provided that the tax law or ordinance does not prohibit that the tax be passed on.

• **Government Purchases**—Purchases by U. S. Government for immediate delivery of any commodity for which there is an emergency need are excluded from the terms of General Maximum Price Regulation.

• **Beef and Veal**—Maximum Price Regulation No. 169 provides, effective July 13, that packers and wholesalers ceilings for each grade of carcass and quarter of beef or carcass and saddle of veal shall be a price no higher than the highest price at which each individual merchandiser sold at least 30% of his total quantity of that grade between Mar. 16-28.

• **Tire Rationing**—Amendment No. 16 to the Revised Tire Rationing Regulations provides, effective July 15, that eligible war workers may be granted a certificate to buy a new grade II tire (third, fourth and fifth line tires fall within this classification) when the casings on his car are unfit for recapping. Eligibility is established by a statement from a committee set up in the employee's plant. A quota of 23,402 Grade II tires will be available July 15.

• **Ice**—Amendment No. 1 to Maximum Price Regulation No. 154 permits adjustment of abnormally low ceiling prices on sales made to ultimate commercial or industrial dealers. Amendment No. 2 to Maximum Price Regulation No. 154 permits adjustments to retail sellers where a dealer is the sole practical source.

• **Thermoplastics**—Distribution is placed under control by General Preference Order M-154. This provides that war orders be filled first and sets up a "ladder of uses" governing distribution of remaining supplies.

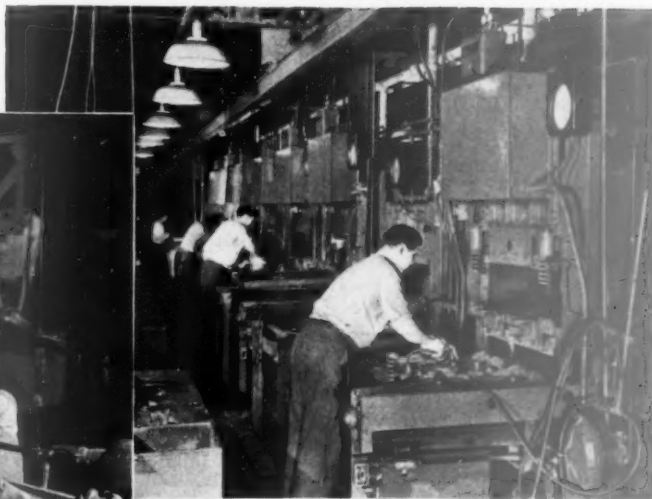
are ready for Gas



No Flaws Allowed. The mask must fit snugly. It must survive rough treatment in condition to do its protective work at a moment's notice. Trained inspectors check *every* General face-piece before it is shipped.



The Sign of Tire Inspection, Repairs and Recapping by Experts Who Know How



Never-Ending Production. These molds, part of the tremendous battery working twenty-four hours a day in General's plant, turn out a constant stream of gas mask face-pieces—and each piece is exactly like the next one.



Speed and More Speed! Too fast for the camera to stop, this automatic stamping machine cuts holes in the face-piece which later become the "eyes" of the gas mask. To prevent accidents, the operator's hands are automatically jerked out of danger as the stamp slams down.

quest of the landlord. Under the law, a "vacating" clause in a lease, under which the tenant agrees to surrender the premises at the expiration of the lease, is automatically void. The same principle applies if there is no lease.

• **What constitutes legitimate grounds for eviction?**—Nonpayment of legal rent, maintaining a fire hazard on the premises, committing a nuisance, use of the premises for immoral or illegal purposes, or other violation of a substantial obligation of the rental agreement. Also, if the landlord, in good faith, wants to occupy the premises himself, or wants to sell the property to another person who has agreed in writing to buy it for his own occupancy. In every case except

nonpayment of rent, the landlord must notify the Rent Director of the proposed eviction and the grounds for it.

• **How is the rent fixed for a house which had not yet been completed on the ceiling date?**—If the building was completed between the ceiling date and the date on which federal rent control became effective, the first rent charged for the new quarters is the ceiling. However, the director has authority to adjust this ceiling downward if it is out of line with maximum levels on similar accommodations.

In the case of a building which is completed after federal rent control becomes effective, the owner must petition the director to set the maximum rent

at least 15 days before the place is to be rented. In such cases, the ceiling will be comparable to that for similar accommodations, with allowance for increase in cost of construction since the ceiling date.

• **What are the penalties for wilful violation of the regulations?**—The director may obtain a court injunction to enforce payment of no more than maximum rent. The tenant, or the Price Administrator in his behalf, may sue the landlord for \$50 or treble the amount by which the rent exceeded the ceiling, whichever is greater. The offender is subject to a maximum fine of \$5,000 and imprisonment for one year.

The Rent Director is empowered to inspect the premises or to require the owner to submit books and records for inspection in order to detect suspected evasions.



"It's Operadio Sound...for Action!"



At Wright Aeronautical Corp.

...an extensive OPERADIO System transmits voice, music, signal and alarm... to speed production, conserve executive time, build worker morale! High-g geared industrial plants everywhere are finding more and more uses for OPERADIO—"The Voice of Production." Extremely flexible, OPERADIO Communicating Systems are engineered to meet individual needs. Investigate! Write Operadio Manufacturing Company, St. Charles, Illinois. Export Division, 145 West 45th Street, New York City.

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Φ SYMBOL OF QUALITY SOUND
COMMUNICATING SYSTEMS

Engineered to embrace all or any combination, of these services: VOICE PAGING
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Postal Rate Hike?

Proposed increase would hit direct mail and bear heavily on those magazines having heavy subscription circulations.

Publishers and advertising men have been set back on their heels by the demand of the House Ways and Means Committee that the Post Office Department raise rates on second- and third-class mail enough to pay handling costs.

• **A Year's Deficits**—For the last fiscal year there was a deficit of \$78,000,000 on second class mail—magazines and newspapers with paid circulation. The deficit on third class—the free publications and direct mail dear to many advertising men's hearts — totaled \$26,000,000.

An increase in second class rates obviously would not be disastrous to those urban newspapers which depend mainly on newsstand and carrier circulation. The Scripps-Howard chain already has come out editorially in its favor. It would go fairly light on those magazines which are primarily newsstand-distributed, since these are shipped in bulk to wholesalers. It is on magazines with heavy subscription circulations that the ax would fall.

• **Between Two Fires**—Publishers already have pushed advertising rates almost as high as they dare. Recently, higher newsstand and subscription prices have been used as an alternative to further rate increases. Increased circulation costs would have to be financed by one means or the other. Another jump in selling prices would mean less circulation. Another jump in page rates would bring howls from advertisers. Either would mean less advertising.

Subscriptions have always been less profitable for most magazines than news-

stand sales; an increase in subscription costs doesn't bear thinking about for many publishers.

• **Post Office Attitude**—There are indications that the Post Office is none too enthusiastic about the Ways and Means committee's demands, and until the department comes through with suggestions for specific rate increases, advertising men and publishers are not protesting publicly.

Ad men are also paying close attention to two other Washington developments. One is the status of advertising under subsidies—if Congress decides to allow the Office of Price Administration the money for them.

• **How Much?**—The other question is the amount of advertising allowable under cost-plus government contracts. Attitude of the Army, Navy, Maritime Commission, et al. on this seems to be that peacetime advertising expenditures may be maintained, but that sudden abnormal increases shouldn't come out of Uncle Sam's pocket (BW—Jun. 27 '42, p29).

Ford vs. FPHA

Detroit housing problem, further complicated by Willow Run controversy, goes before the Truman investigators.

The Detroit area's off-again, on-again housing situation (BW—Jun 27 '42, p86) has been further confused by a stalemate involving the Ford Motor Co. and the Federal Public Housing Authority, this week became the subject of an investigation by the Truman committee.

Plans of FPHA for a vast housing project to adjoin the Willow Run bomber plant had progressed to the point of placing several hundred surveyor's stakes on Ford property. The company refused permission for completion of the survey, and Ford employees yanked up the stakes. Apparently a long legal battle is ahead.

The company explains its opposition to the project as an attempt to prevent "a mistake, and an unnecessary, wasteful, and extravagant use of government funds and vital war materials."

Automobile union leaders are inclined to feel that there's another reason why Ford isn't anxious to see the "Bomber City" built. After the war, Willow Run is likely to be one of the biggest casualties, and it's a fair assumption that the Ford Motor Co. would not relish having to deal with a whole community of unemployed workers. In such a circumstance, "Bomber City" would provide a tremendous focus of industrial unrest.

For their part, union leaders aren't anxious to see the community established either.

★ AMERICA ★ ★ WORKING ★



His job is keeping 50 machines rolling in the war-busy plant of United Screw and Bolt Corp., where R & M Air Circulators keep workers comfortable for peak efficiency.

• • R & M helping • •

YOU won't find heat-weary workers in the progressive organization of United Screw and Bolt Corp.! Production of screws, nuts and allied fastening devices—for everything from Army trucks to aircraft instruments—is kept zooming by famous R & M Air Circulators that *energy-condition* employees. Super-powered by dependable R & M motors, they deliver 7500 to 9500 cubic feet of breeze per minute!

★ Also performing essential wartime jobs are *other* R & M products . . . revolutionary R & M Moyno Pumps that make the *toughest* pumping jobs look easy; motors that deliver a "baker's dozen" in power-performance; hoists and cranes that "air express" industry's hard-to-handle loads; motor drives that assure peak output from old and new machines of all types.

★ Busy we are, for Uncle Sam! But our organization is always ready to help you find the answer to *your* ventilating problems. Write us. The address, since 1878, is Robbins & Myers, Inc., Springfield, Ohio.



MOTORS ★ HOISTS ★ CRANES ★ FANS ★ MOYNO PUMPS



Spearheads of Victory . . . Protected by Diebold Armor Plate

The war production race is on—and Diebold is in it, with all we've got—our manpower, our engineering and manufacturing ability, our brains, our brawn, our energy. Everything! Diebold workers and management operate as a unit-of-effort. Our sole goal is your goal—to win.

We know the priceless combat advantage of adequate protection for guns, for airplanes, for tanks. For these war implements, Diebold armor plate provides the extra increment of safety that has come as the result of over 80 years of ceaseless effort to excel in building burglar-resistive and fire-resistive equipment for both office and plant.

Nor are we forgetting the great emergency need for protection of vital records that keep smooth-running the wheels of war production. To speed up work, to conserve precious hours, to cut costs, to properly protect, Diebold offers Cardineer Rotary Files, fire-resistive safes, vault doors, Electric Rekordesks Safes and many other business tools of proven quality and marked efficiency.

On the world's battle fronts and on the business front

at home, Diebold is doing its bit to protect—to conserve—to stimulate. When next you face a question of office records, call Diebold's Methods Department. We are ready and eager to help you in solving problems of record-processing or protection.

DIEBOLD SAFE & LOCK CO. • General Offices: Canton, O.

Protect Important Records in DIEBOLD Fire-Resistive SAFES



"You can't fool a fire." If you are trusting your vital records, plans, specifications, etc. to any safe not labeled for your particular fire hazard, you are trusting to luck . . . A fire may mean COMPLETE LOSS. Call in the DIEBOLD MAN now for an analysis of your present fire-protection needs and ask him for recommendations . . . There is no obligation.

BUY WAR BONDS AND STAMPS!

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METHODS EQUIPMENT • SAFES • MONEY CHESTS • ELECTRIC
REKORDESK SAFES • BANK VAULTS • OFFICE ACCESSORIES

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DIEBOLD BUSINESS TOOLS PROTECT AND HOUSE AMERICA'S WEALTH AND RECORDS

THE WAR—AND BUSINESS ABROAD

Egypt—the Crossroads

Axis gambles desperately to capture Alexandria and Suez in its effort to gain access to the raw materials of the East—and on Hitler's success depends future conduct of the war.

Few Americans realize it yet, but, should the United Nations be defeated in Egypt, this disaster would have as serious repercussions on the length and outcome of the war as the collapse of France or the fall of Singapore (BW—Mar. 14 '42, p. 34).

For, if British and New Zealand troops and American planes and pilots fail to stop the Axis short of Alexandria and Suez, Britain will be forced to evacuate the entire Mediterranean (see map, page 14).

What the Drive Means

And should Hitler gain control of the Mediterranean there would be little hope that the United Nations' minor bases at Aden, Cape Town, or on Madagascar and Ceylon could stop the Axis from making a junction in the Indian Ocean. Once Tokyo and Berlin get a complete string of fortified outposts in this part of the world, it is likely to become a long and costly job to drive them out.

The situation became serious when Axis forces, massing tremendous numbers of tanks and men, succeeded in capturing Tobruk in a short, fierce assault. It became alarming when, before the British could reform their lines for a stand at the Egyptian border, Axis forces pushed on successfully without even allowing time for the British to organize a counteroffensive based on the railhead and Mediterranean port of Matruh.

Planes and Paratroops

With Axis forces already alarmingly near Alexandria and Axis planes able to strike from bases no more than 150 miles from this great Mediterranean naval base, and with Nazi paratroops massed in Crete to aid in the battle for Egypt or to raid Palestine as part of a pincer attack on Suez, the situation is rapidly growing desperate.

The importance of Egypt is strategic rather than economic, though in the hands of the Axis it would supply desperately needed cotton, a little oil, and welcome—though small—supplies of fruit and vegetables. More than \$80,000,000 worth of Egypt's fine, long-staple cotton is stored in Alexandria warehouses now due to lack of ships to haul it away. In addition there are the vast masses of supplies necessary for a first-class base—

oil, gasoline, machine shops, and food.

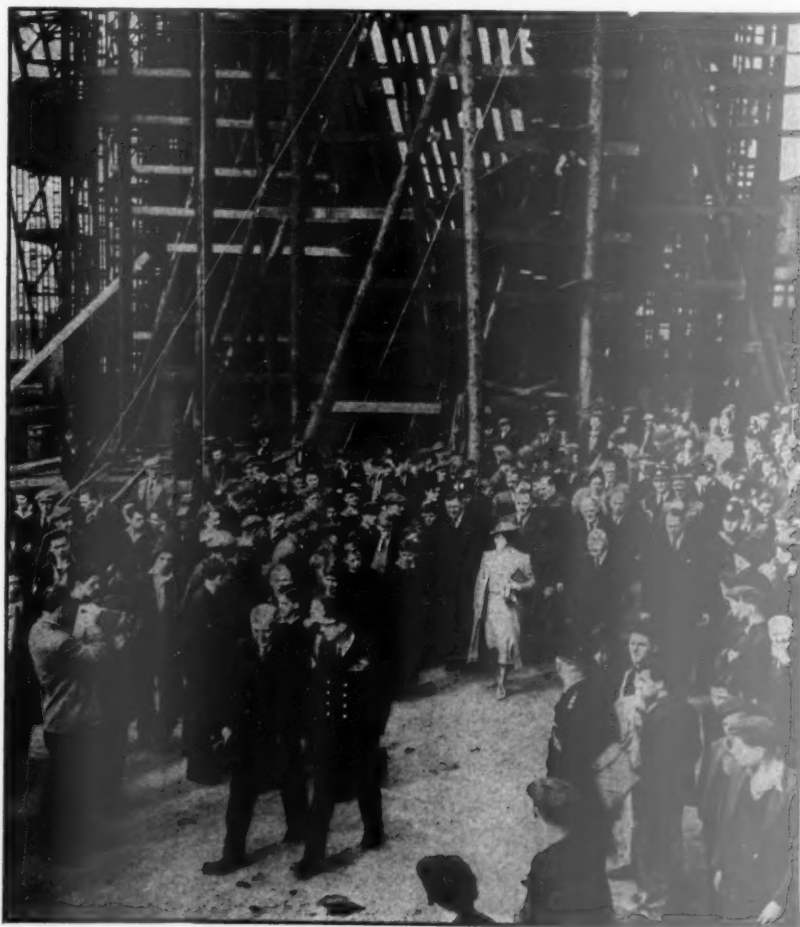
But Egypt's real importance is its location on the crossroads between Europe and the East. As long as Britain can hold Gibraltar and Suez, the Axis is pretty well bottled up in Europe. If Suez goes, England's hold on the Mediterranean is lost, and the Axis is free to move on toward India, to utilize the resources of Africa, to intensify its raids on South Atlantic shipping, and to attack Latin America.

The Middle East is the focus of attention this week, but it is not the only front that is active. Russia is still successfully holding off the Germans in the north and along the Ukrainian front, with terrific costs in men and materials to both sides. Supplies continue to arrive from the United States, both by way of the Arctic ports of Murmansk and Archangel and by the long, tenuous route around Cape Town to Basra, and then by rail across Iran to the Caspian Sea where they are picked up by the Russians.

Lull in Pacific Theater

In the Far East, except for the American air raid on Japanese-held Wake Island, there is a tense lull, with Washington and Moscow watching anxiously to see whether Japan will push its way up the Aleutians toward Alaska or turn on Siberia.

In China, the Japanese troops are inching their way up the railroad lines toward the interior.

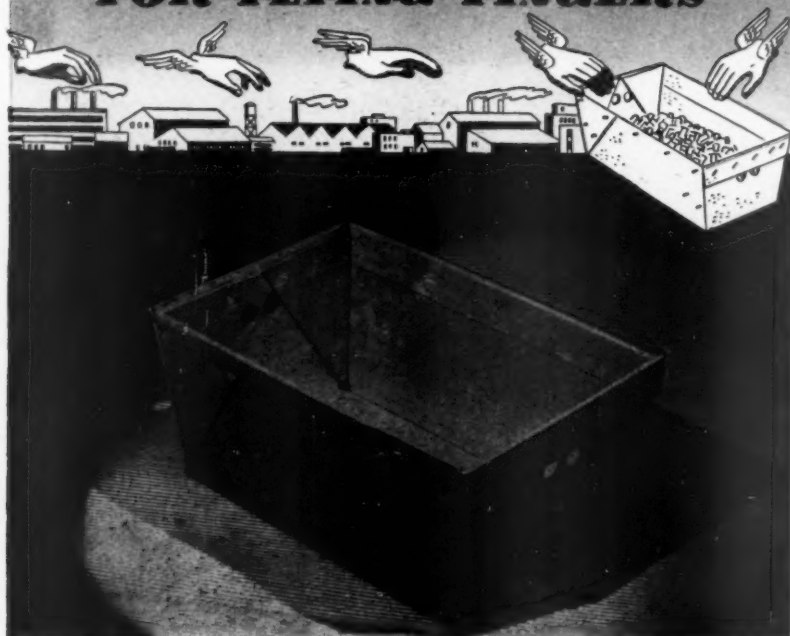


ROYALTY VISITS SHIPYARD

King George and Queen Elizabeth visit a Scottish shipyard where a 10,000-ton freighter was turned out (keel to delivery) in six months—a "re-

markable record" according to British authorities. This compares with a record of 46 days (keel to launching) for the most recent addition to the growing fleet of American-produced Liberty ships.

SUPPLY BASES FOR FLYING FINGERS



H & D CORRUGATED TOTE BOXES CONSERVE CRITICAL MATERIALS

In hundreds of war factories where vast quantities of small parts must be handled swiftly and accurately... where women workers make it imperative to check injuries and fatigue... where all critical materials must be released for production, H & D corrugated tote boxes are proving to be practical, efficient "speeder-uppers" for war schedules. Here's why:

Economical—constructed of inexpensive available materials, H & D corrugated tote boxes save you money in original costs.

Light Weight—easier to handle, they lessen worker fatigue, help reduce costly errors in handling small parts on production line or in storage.

No Hazards—flying fingers aren't ripped by jagged edges.

Adaptable to Many Jobs—available in many sizes, styles and sturdy shapes for an infinite number of production line, intra-plant haulage and storage operations.

Save Storage Space—delivered set-up and nested, as is the model illustrated... or flat for quick, easy set up.

Talk to your Production Line and Stock Room Men. Learn specifically how and where you can save money, materials and minutes with H & D corrugated tote boxes. You'll find the styles your men want in H & D's free bulletin "Tote Boxes." A copy is yours for the asking; write today.

BETTER SEE H&D Authority on Packaging

HINDE & DAUCH 4261 DECATUR STREET, SANDUSKY, OHIO

FACTORIES in Baltimore • Boston • Buffalo • Chicago • Cleveland • Detroit • Gloucester, N. J. • Hoboken • Kansas City • Lenoir, N. C. • Montreal • Muncie • Richmond • St. Louis • Sandusky, Ohio • Toronto.

One of the grimmest battles of all is being fought in the Atlantic where ships are still being sunk faster than they can be replaced in American yards, despite the speedup in May which boosted production of five Liberty vessels in one Oregon yard to an average of 55 days from keel laying to launching. Until this record can be counterbalanced by a drastic curtailment of sinkings, the production miracle (4,000 planes and 1,500 tanks in May) will mean little on such far away battle fronts as Egypt, China, and the Soviet Union.

While long-range American planes are being flown across the South Atlantic this week to reinforce Egypt, and stocks of American war supplies are being redistributed from warehouses in South Africa and Iran where they have been accumulated during the last few months, the Navy is grappling with the problem of clearing home waters of submarines.

Need for Small Boats

To do this, hundreds of small boats must be built or commandeered and equipped with radio and sound-detection devices, and, in the case of the sub-chaser type of boat, with gear to carry 600-lb. depth charges.

Nearly 2,000 small pleasure craft have already been commandeered but most of them are less than 65 feet in length and therefore are too small to handle depth charges effectively. With Germany reputedly turning out submarines at the rate of at least 20 a month, this problem of submarine torpedoings is bound to become increasingly serious unless this country finds some means of combatting it.

Much depends on the outcome of the battles on all these fronts, but the major test during the next few weeks will be in the Middle East.

Now or Never for Axis

Either the Axis will take Alexandria and Suez, and make a successful landing in Syria or Palestine in the next few weeks of this hot but waning summer of Nazi hopes or the whole campaign will fizzle. The Nazis know this as well as the United Nations, and are concentrating their attack accordingly.

But the campaign also has its bright side. Unless Hitler can carry out this bold Mediterranean project in the next few weeks, and then force his way to the backdoor of the Caucasus before September, there will be no time before winter to finish the job of grabbing Russia's oil supply and thereby reducing the striking power of the Soviets.

The whole maneuver is a desperate gamble for tremendous stakes. If the Axis fails to carry through its plan in the very short time allowed, it has almost certainly lost its last opportunity for, before another spring, all its forces are likely to be needed on the Russian and new Anglo-American fronts.

Canada's Tax Blitz

New Ilsley budget, including "forced savings" plan, will sock business and individuals more severely than ever before.

OTTAWA—Canada's Finance Minister, 48-year-old James Lorimer Ilsley, stood in the House of Commons on Tuesday evening of last week to deliver his annual fiscal budget. When he sat down about two hours later, Canadians knew that they were experiencing total war on the economic front with a vengeance.

Ilsley's proposed new taxes will do three things:

(1) Confiscate national income to an unprecedented level to make good the Ottawa policy of "pay as you fight" as far as is practicable.

(2) Crack inflation at its source by draining off surplus spending power.

(3) Create a postwar transition cushion for business and individuals.

• **Drastic Levies**—Under Ilsley's proposals Canada is socking business as hard as it is socked in Britain, while individual taxpayers will be hit almost as hard. And both will be taxed much more severely than they are in the United States. Political wealth-conscriptionists in Canada are left pawing empty air. Business is left with 70% of standard prewar profits, none of its excess war profits.

President Roosevelt's proposal for a \$25,000 ceiling on personal income is virtually achieved in Canada without the specific limitation being applied. All that is left to the individual with an income of \$100,000 is \$21,000; to the man with \$500,000, a bare \$36,000.

• **Ottawa's Plan**—Principal specific features of the proposed Dominion budget are:

(1) The excess profits tax is boosted to 100%.

(2) Twenty per cent of the excess profits tax will be refunded to business after the war whenever the tax was paid at the full 100% rate.

(3) The national defense tax is merged with the personal income tax, on which rates have been drastically upped.

(4) Taxes—both business and personal—will be collected on a pay-as-you-earn basis during the tax year. Monthly tax payments must be made by companies, based on the previous year's profits and adjustable at the end of the year; weekly or monthly payroll deductions will be made to handle individual income taxes; compulsory quarterly payments will be demanded of persons whose taxes are not collectible at the source.

(5) "Forced savings" will be imposed

on personal income taxpayers, the amounts being collectible as a part of the income tax but refundable after the war with 2% annual interest.

(6) New or increased excise taxes are being levied on luxury goods, travel, and communication services—both to produce revenue and discourage spending.

• **Milestones**—The two departures in principle are forced savings for business and individuals, and the synchronizing of payments and receipts.

New and increased taxes will add an estimated \$377,850,000 to treasury revenues (exclusive of collections from forced savings) for a total of \$2,049,450,000 against estimated expenditures of \$3,900,000,000, leaving a deficit of \$1,850,000,000 less \$95,000,000 of refundable taxes. Ilsley figures on raising two-thirds of the residuary deficit by war bonds and certificates. On the basis of old rates of taxation, Canada was paying 78% of direct war costs out of revenue or 52% of all costs including the financing of aid to Britain. Ilsley is seeking to maintain the ratio.

• **Profits Tax and Refund**—Canadian business men anticipated the 100% excess profits tax. The provision for the postwar refund is an agreeable surprise. Here is how the increase in the profits tax works out:

Prior to the current budget a company paid an 18% corporation tax on all profits, and on top of that either 22% on all profits or 75% on excess profits above standard profits, whichever rate produced the greater tax. The division line at which the 75% rate was greater than the combined 18% and 22% was at 156.7% of standard profits (average for four prewar years).

Under the new budget the 18% corporation tax on all profits is continued and a flat rate of 12% on all profits is added. After that the company pays either an extra 10% on all profits or 100% on excess profits, whichever is greater in yield. The division line becomes 116 2/3% of standard profits. A company whose profits are less than that percentage of standard pays 40% on all profits while the company with higher profits pays 30% on total profits and 100% on excess profits less the 30% already computed thereon. The over-all result is that companies pay to the government in taxes everything above 70% of standard profits.

• **Exemption Removed**—Previously, small businesses with profits up to \$5,000 were exempt from the excess profits tax. This exemption is now reduced so that such businesses will pay the 12% flat tax in addition to the 18% corporation income tax.

The 20% postwar refund of excess profits is applicable only to companies paying at the full 100% excess profits rate. Amounts refundable on 1942 profits will be returned without interest within two fiscal years after cessation of

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★ CANADA AT WAR

Ships

Canada started this war with a very small ship-building industry. Today there are 17 major and 58 other yards in full operation. Canada's first 10,000 ton cargo vessel, launched in October last year, completed its first Atlantic crossing in February! Since then many others have been launched.

The present programme is for 172 cargo ships, costing \$325,000,000. Over 50 keels have been laid. About 95% of the components for these ships are now made in Canada. Before the year is out the Dominion will be launching a new cargo ship every few days.

(Not included in the above figures are some 200 naval ships already launched.)

The Royal Bank of Canada

Head Office—Montreal

This advertisement is published in the belief that our American Neighbours will be interested in the facts presented. More detailed information is available on request to The Director of Public Information, Ottawa, Canada.

How Canada's New "Forced Savings" Plan Will Work

Ottawa's new budget boosts income taxes and adds a "forced savings" scheme aimed to curb inflation and help provide funds now to cover war costs. Here are

the figures showing how income taxes have been boosted in various brackets, and what the taxpayer will get as a post-war refund under the new savings plan.

Income \$	Single person			Married persons without children			Married persons with two children		
	Former Tax	Total New Tax	Post-War Credit*	Former Tax	Total New Tax	Post-War Credit*	Former Tax	Total New Tax	Post-War Credit*
700	35	40	20	.....	.....	.....	.....	.....	.....
850	57	116	58	.....	.....	.....	.....	.....	.....
1,000	87	172	80	.....	.....	.....	.....	.....	.....
1,250	162	267	100	50	50	25	22	32	16
1,500	217	367	120	75	217	108	35	49	24
2,000	340	601	160	175	431	200	60	215	108
3,000	622	1,064	240	400	884	300	215	668	334
5,000	1,332	2,128	400	1,000	1,878	500	735	1,662	600
7,500	2,400	3,570	600	1,965	3,270	750	1,637	3,054	900
10,000	3,600	5,112	800	3,080	4,762	1,000	2,710	4,546	1,200
20,000	9,105	11,829	800	8,330	11,279	1,000	7,890	11,063	1,200
30,000	15,082	19,196	800	14,085	18,446	1,000	13,621	18,230	1,200
50,000	28,392	35,703	800	26,965	34,553	1,000	26,437	34,337	1,200
100,000	64,347	81,137	800	61,875	78,987	1,000	61,299	78,771	1,200
500,000	411,720	473,104	800	401,120	462,954	1,000	400,408	462,738	1,200

* "Forced Savings."

hostilities, on 1943 profits within three years, etc.

• **Personal Income Tax**—The tax structure for personal incomes is changed in the new budget to a flat tax (at rates varied as between single and married persons and as to the amount of income in the case of single persons) which is supplemented by a graduated income tax.

The old income exemptions of \$750 for single persons and \$1,500 for married persons with an additional exemption of \$400 for each child are changed now to a common exemption of \$660 for everybody which also applies to the flat tax, but deductions from the tax payable of \$150 for married persons and \$80 for each child are allowed under the graduated tax, and \$28 for each child under the flat tax. Rate increases will up the taxes of persons in low and medium brackets by close to a third of what was previously paid without counting the new compulsory savings payment.

• **Forced Savings**—Under the compulsory savings plan the refundable portion of taxes paid amounts to 50% in the case of incomes up to \$850. But in the higher brackets there are limitations on the amounts to be refunded: 8% of the income of single persons or \$800, whichever is less; 10% of the income of married persons or \$1000 (plus 1% for each dependent up to \$100) whichever is less.

Thus a single person receiving \$850 will pay \$116 and have \$58 as a post-war nest-egg; the \$1,000 income will pay \$172 and have a credit of \$80; the \$3,000 person will pay \$1,064 of which \$240 will be returnable.

• **"Ceiling" on Refunds**—The limit of refund for both married and single persons is reached at a salary of \$10,000 on which the total tax collection from a single person will be \$5,112 of which \$800 will be returnable, and from a married person \$4,762 with \$1,000 returnable. The single \$100,000 man will pay in \$81,137 and have only the \$800 to his credit after the war (see table).

Voluntary savings in pension funds connected with the taxpayer's employment, in life insurance, in principal payments on the mortgage of a single residential property may be deducted from forced savings and therefore from the amount of tax payable up to the limit of the refundable part of the tax.

• **Work for Employers**—Canadian employers for some time have had to deduct national defense taxes from wages and salaries of employees. The job of making payroll deductions for employees' income tax will involve a lot more paper work because the deductions will have to allow for voluntary savings. Employers are required to remit deductions monthly but do not have to credit them to individual employees until the end of the year.

Employees will make individual returns at the usual time and be responsible for paying any part of their due tax above what was remitted by employers. Income on which taxes are not deductible at source has to pay in quarterly instalments.

• **Mining Exemptions**—Gold and silver mining is hereafter excluded from income tax exemptions allowed on contributions up to \$500 to the capital of a new mining company and up to \$5,000 in the aggregate of individual

contributions or an expenditure of \$5,000 by a company prospecting its own property. These exemptions are extended to cover all base metals and nonmetallic strategic minerals.

• **Sumptuary Levies**—Excise taxes on luxury goods or nonessentials subject to price ceilings when collected at the retail level are to be distinguished from actual prices by excise stamps or separate items in the bill. The tax on gin and whiskeys was \$4 a gallon before the war, was raised to \$7 in 1939, and now becomes \$9. A boost from 6¢ to 10¢ a pound on malt will raise the price of beer. The levy on wines is upped correspondingly.

Cigarettes formerly paid a 50% excise tax, will now pay 1¢ extra for every five cigarettes, cigars 25% more, other smoking supplies accordingly. Soft drinks have been paying 1¢ a bottle, will now pay 2¢. The impost on passenger transportation is raised from 10% to 15%, with a 75¢ exemption and extra levies on berths and parlor-car seats. Long-distance calls will pay the same rate as transportation.

• **Luxury Taxes Boosted**—The duty on furs goes from 12% to 25%. Candy and chewing gum will carry a 30% tax, photographic supplies 25%, expenditures in dance-halls and night-clubs 20%. A 25% tax is imposed on handbags, luggage, diamonds and jewelry, cut-glass and crystal and chinaware not required for service, watches and clocks, tobacco pipes, and desk accessories.

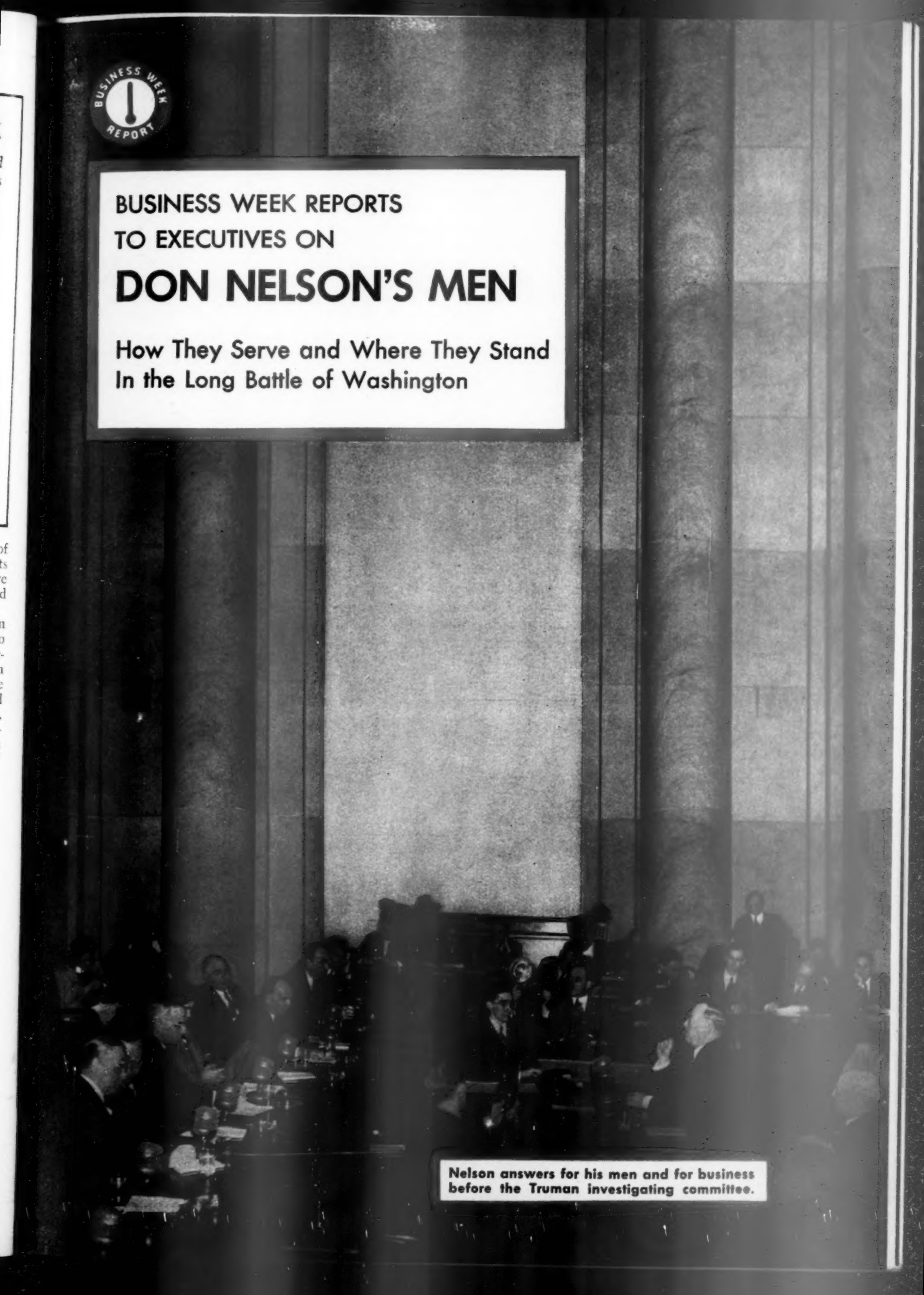
Customs duties are removed from machinery for developing oil sands and from a few other machinery items and are reduced on some other articles required by industry.



**BUSINESS WEEK REPORTS
TO EXECUTIVES ON**

DON NELSON'S MEN

**How They Serve and Where They Stand
In the Long Battle of Washington**



**Nelson answers for his men and for business
before the Truman investigating committee.**

DON NELSON'S MEN

Many Americans, in and out of business, joined European scoffers two years ago when President Roosevelt demanded that national production of airplanes be increased to 50,000 annually. The skeptics admitted that this unheard of figure might ultimately be attained but they were certain it could not be reached in time to affect the outcome of the present war.

Last month the chairman of the War Production Board, Donald M. Nelson, revealed that United States industries would turn out 60,000 planes this year—10,000 more than the "impossible" goal set in 1940. He might have added that the current production score is as good or better all along the war supply line. There are detours and rough spots ahead but the main road is clear. We are all set to grind the stuff out from here on.

What They've Learned

A year ago the merger of New Deal forces and business into a single machine appeared improbable. The cooperation responsible for the current records resulted from two major factors. Pearl Harbor gave the factions in the U. S. something more important to battle than each other. And by working together toward a common victory, mutual understanding (often respect and liking) has grown up between business men and Roosevelt followers. Many a hard-fisted manufacturer has learned with some surprise that Leon Henderson, the price administrator, doesn't have horns; and many a passionate New Dealer has been equally astonished to discover that business men are concerned with higher concepts than profits.

This development is all to the good. The Washington association will condition both sides for a better application of controls that will be necessary to cushion the change-over from war to post-war recovery.

The dollar-a-year business executive should, indeed, be well conditioned for future trials. Since he took his stand on the Washington ramparts many dornicks and dead cats have come his way.

A rhinoceros hide is part of the politician's regular equipment and he is apt to ridicule the business man as being overly sensitive. When Donald Nelson was on the stand in one of the Congressional investigations into the war effort, a Committee inquisitor observed that government officials had to learn to take criticism and suggested that business men in Washington cultivate the art.

"Look at ball players," he said. "They don't toss in their gloves or walk off the field every time they get a razzing from the grandstand."

"Yes," Nelson shot back, "but we are accused of throwing the game."

The Hard, White Glare

Mighty few business men drawn to Washington for war work enjoy the clashes or the glare of the spotlight. The prospect of returning to their homes and offices intensifies their yearnings for peace. There probably isn't one who hasn't tried to escape to his former environment at some stage of the struggle. In repeated instances, their companies have had to make them stay put.

One thing they have learned is that the votes "back



These are the managers of all the management men in WPB. As members of the nation's new War Production Board, they met in their first official session on Jan. 20, 1942. Starting at the left: Leon Henderson, Price Administrator; James V. Forrestal, Undersecretary of Navy and alternate for Secretary Knox; Jesse Jones, Federal Loan Administrator; Frank Knox, Secretary of the Navy; Her-

bert Emmerich, executive secretary, WPB (standing); Donald M. Nelson, chairman, WPB; Vice-President Wallace, chairman of the Board of Economic Warfare; John Lord O'Brian, general counsel, WPB (standing); Robert P. Patterson, Undersecretary of War, representing War Secretary Stimson; Lieutenant General William S. Knudsen, Director of Production, War Department.

home" are Washington's unit of trade and that the politician's actions are often planned to attract the largest possible number of these counters which keep him in his job. A favorite method of attracting votes is to lambaste business—big business especially. So instead of acclaim when peace returns, the dollar-a-year man expects to be investigated, thoroughly, publicly, and repeatedly.

"Maybe we'll be indicted," add the more pessimistic.

Company executives are accepting the risks all over the land as they join the war production army. The War Production Board, top organization of that army, in which most of them are enlisted has grown until it numbers 16,121 persons, including all types of employees. Of these 12,786 are in Washington, the rest in the field.

Also WOC, WAE, and CS

WPB executives aren't all dollar-a-year men. This classification included 575 names as of June 18. In addition 167 were listed as without compensation—WOC men in the Washington vernacular. These latter are consultants who have no administrative powers; hence they do not have to be tied in as employees of the government through the dollar-a-year device, though they are often graduated into the dollar-a-year status. The third category are the 110 WAE men who work on a when-as-employed basis, receiving daily fees of from \$8.88 to \$22.22 for special, short jobs.

Last and most numerous are the executives who have quit their own companies and gone to work for the government on a temporary civil service basis, receiving regular annual salaries. There are well over 1,000 of these serving at Washington and in the field. Incidentally members of Congress favor this arrangement strongly; they say it eliminates a division of loyalty between the

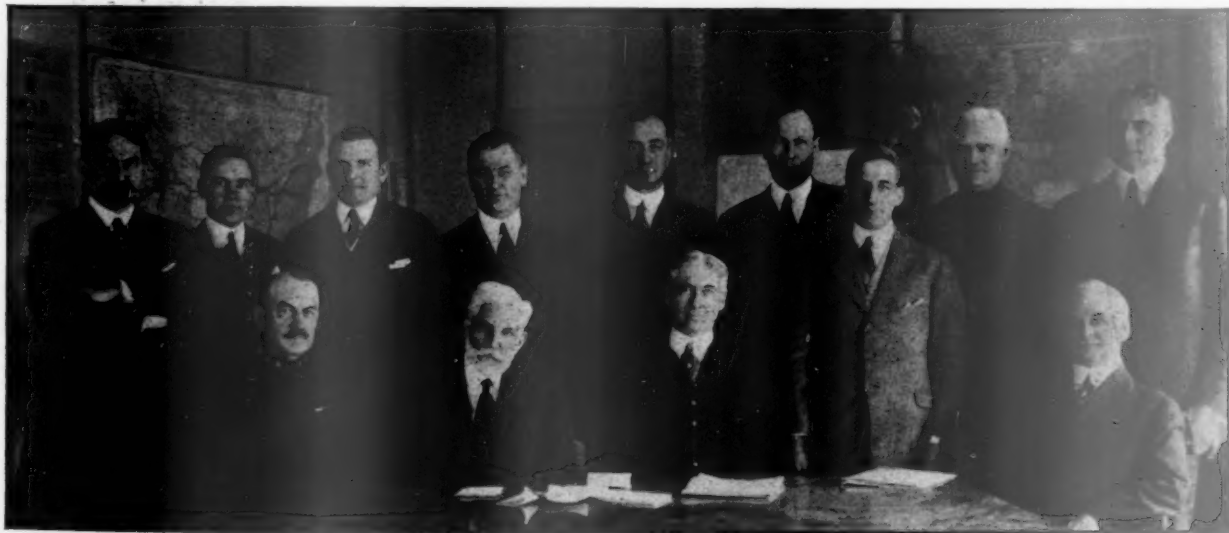
government and the company—something they think is inherent in the dollar-a-year arrangement.

So heavy is the Congressional emphasis on this point that the WPB enlists dollar-a-year men only after it has tried and failed to induce the wanted executive to quit his company job and go on the federal payroll, and after it has been unsuccessful in finding someone else who could fill the post on a salary basis. Today Washington has 842 of these salaried WPB executives (men drawing \$5,600 a year or better) and there are about 200 additional in other cities.

At Other Washington Posts

But the WPB isn't the only federal organization that has enrolled business men to help win the war, though it has by far the greatest number. Others are so widely scattered among departments and bureaus, including War and Navy, that no one has attempted to count them all. The Truman committee (on national defense) did send questionnaires on the subject to agencies directly concerned in the war effort. A sampling of the returns (made last December) shows that the Office of Emergency Management has 26 WOC men and 165 on salary or other compensation; the Reconstruction Finance Corp. has 26 dollar-a-year men; the U. S. Attorney General has 95 dollar-a-year lawyers; the Maritime Commission has 15 men on a \$25-and-up per diem basis; the Board of Economic Warfare lists ten dollar-a-year-men.

Compensation paid by the government to WPB's corps of business executives runs from \$15,000 a year down. It took a special act of Congress to get that \$15,000 for Nelson when he quit his \$70,000 a year job with Sears, Roebuck. Special authorization also was necessary to get William S. Knudsen the rank and pay of a lieutenant



Historic precedent for the WPB of today is the War Industries Board of the last world war. This 1917 meeting of the WIB brought together (from the left, seated) Rear Admiral Frank F. Fletcher, Navy; Robert S. Brookings, chairman, Price-Fixing Committee; Bernard M. Baruch, board chairman; Hugh Frayne, representing labor; and (from the left, standing) Edwin B. Parker, Priorities

Commissioner; H. P. Ingals, board secretary; George N. Peek, Commissioner of Finished Products; J. Leonard Replogle, Director of Steel; Thomas Nelson Perkins (not board member); Alexander Legge, board vice-chairman; Gerard Swope (not board member); Major General George W. Goethals, Army; Albert C. Ritchie, general counsel. Leland L. Summers, member, not present.



Your first encounter at WPB headquarters is likely to be with Mrs. Belle Hart, the board's receptionist. "Not first barrier," she insists "but first aid." And her name could well go along with the chairman's on that award for red tape cutting beyond the call of duty.

general when he went over to the Army. Instead of the \$300,000 a year which he drew from General Motors, Gen. Knudsen gets \$9,700 from Uncle Sam.

A survey shows that most of that group of business executives whom the government has taken over and put on a regular salary basis get slightly more from the U. S. than from their former companies. This is from design, not accident. The WPB considers that a man accepting regular pay in Washington ought to get a little more in the federal job. Reasons are obvious. In most cases the man has a family and a home that must be maintained in a distant location. On top of that he must live in Washington where expenses are high.

Washington Pay Scale

Here is a recent breakdown of this group of WPB executives according to their salary classifications:

Number Employed	Annual Federal Salary
481	\$5,600
3	\$6,000
241	\$6,500
1	\$6,750
3	\$7,000
5	\$7,500
89	\$8,000
1	\$8,250
2	\$8,500
15	\$9,000
1	\$15,000

This dollar-a-year idea which has had so much of the limelight was developed during the first World War and revived by Congressional legislation for the present crisis. It is intended to obtain for the government the best business brains of the nation as represented by men getting large compensation from private sources. The dollar is paid to bind them as legal employees of Uncle Sam. In

a very few cases the dollar-a-year executive is an independently wealthy person who comes to Washington for service in his former specialty. But the vast majority are "loaned" from the active management of corporations on the recognition that the rush of modern war requires the guidance of those familiar with very latest in production techniques. In nearly all cases the dollar-a-year man gets his regular salary from his company while the government pays him expense money to compensate somewhat for the high cost of living in Washington.

The Expense Account

This expense money comes to \$10 a day for all time that the dollar-a-year man spends on official business, which is figured as the entire period away from home. In addition, he gets travel expenses. Allowances to without-compensation men are the same. Men on regular salary and "when-as-employed" specialists get their transportation costs and \$6 a day for other expenses.

The fact that dollar-a-year men are paid by their companies while working for the government is the point on which attacks against them center. Congressional critics point out that such men are in a position at Washington to pass along favors to their companies or their industries. This possibility is admitted by all and sundry. The business man is inevitably interested in his own concern. But defenders of the dollar-year system point out that you don't change the nature or interests of a business executive by putting him on a salary from the government.

They also have a pertinent question for Congressmen: "Why isn't it just as easy for a business man to do an honest job for his country while retaining his company



Coatless Keith Funston, of Sidney Weinberg's office over in the Social Security Building, visits a post in the hot, crowded front lines of nearby Temporary R, a War Production Board address in Washington that's well known to many a business pilgrim to the capital.



A meal—and a chance to compare notes on the Washington adventure—in the WPB executives' lunchroom, New Social Security Building. Foreground table (from the left clockwise): Milton Katz, Arthur B. Newhall, H. George Wilde, Sidney Sherwood, Dean Kimball, Wil-

liam E. Levis, J. S. Knowlson. Window table (from the left clockwise): Sidney J. Weinberg, Dr. J. K. Galbraith, Dr. Merrill Meigs, Edward Locke, John Lord O'Brian. At table by door are Harry Camp, David Ginsberg, John E. Hamm of the Office of Price Administration.

pay as it is for lawyers in Congress to remain honest while receiving pay from private clients as well as from the U. S.? This is traditional practice for both senators and representatives, and it is legally OK as long as they don't handle cases against the government."

Some Day It'll End

After all, men on the government payroll have a temporary status, are there for the duration only. Any of them who can see beyond their own noses must be wondering what's to become of them after the war ends, are naturally interested in the company jobs which they have left and to which they hope to return. Thus the temptation to throw favors in the direction of companies where a peace-time berth might be promoted still exists despite the government salary. A chiseler who used a patriotic service as a vehicle for company favors would succumb as easily in a salary status as in that of dollar-a-year man.

Incidentally, WPB records show instances in which companies have wanted to withdraw executives they had loaned. In "leaning over backward" to be fair to the government, the men had put their own concerns in an unfair position with competitors.

To match the rumors of underhand favors, there are stories in Washington of cases where the business connections have back-fired. One has to do with the vice-

president of a large corporation who had fallen from grace with the company's controlling executive group. While they were debating a painless method of getting rid of him, the 1940 defense drive was inaugurated. The undesirable was deftly eased into a Washington job. But the operation wasn't deft enough to hide its purpose from the victim who nurtured a natural resentment against his former company. This man fitted well into his new job. As the defense organization expanded he was advanced until, in the last reorganization, he attained a place of real power. Now he cracks a mean whip over his industry and his former employers feel that he reserves his choicest stingers for them.

No Autocrats Wanted

Perhaps he belongs to a type of business man with a latent streak of the autocrat in his make-up. Top WPB officials have had some experience with the necessity of keeping an eye on executives with a dictator complex that is brought to the surface by the power they wield in Washington. Here they don't have to compromise with stockholders, customers, competitors, or labor. Such men can be more exacting and intolerant even with their own industries than a case-hardened government bureaucrat.

Business men in Washington—dollar-year, WOC, salaried or whatever—are highly sensitive to censure. A

favorite admonition of Donald Nelson is, "Remember—down here we are swimming naked in a gold fish bowl." Most realize that the stake of public good-will involved in the war effort is so important that what they do will color the entire government-business relationship after the war; that certainly the dumbest possible course that could be taken right now would be to capitalize the war crisis for selfish profits.

How They See It

Realists among the WPB officials state the case thus: "Business men are human beings and there are always a few human beings who will chisel. We are doing everything possible to prevent this. Granting that the dollar-a-year arrangement isn't perfect, it did the job in the last war. And Congress has adopted it for this war. It is up to Congress to change the setup if a better plan can be developed."

Most consistent critic of dollar-a-year men is Senator Harry S. Truman, Missouri Democrat. It was the Truman committee on the national defense program which investigated the Guthrie affair.

Robert R. Guthrie came from Paducah, Ky., where he operated a department store from 1911 to 1938. He moved to New York, entered a stock exchange firm as customers' man, held membership in various commodity exchanges and did the buying for the Paducah store. He joined the defense effort in Washington in 1940, later became chief of WPB's clothing and leather goods branch. He resigned on March 14, making sensational charges against some of his associates. Most serious was his accusation that executives within the WPB had held up conversion of consumer durable goods and textile indus-



When Sidney J. Weinberg is in Washington, one of his many concerns as assistant to Nelson is the enlistment of WPB executive personnel ("body-snatching," some business men call it). When he is at home in Scarsdale, N. Y., one of his chief interests is his collection of Lincolniana, including (in cases shown on desk) prized letters written by the War President of 80 years ago.



When it's all over, the formal appointment, hanging on the office or study wall, will recall to dollar-a-year men the days when they made history. William L. Batt, No. 2 man on the War Production Board, can also recall that in wartime 1942 he worked for the U.S. on the Combined (British-American) Raw Materials Board, sometimes known as the "World WPB"; that is, if any questioner can get him to talk about his service.



tries to war production and he singled out Philip D. Reed, chief of WPB's Bureau of Industry Branches, for special blame. And the fact that Mr. Reed was a dollar-a-year man, on leave from his \$120,000-a-year job as chairman of the board of the General Electric Co., was dramatized by some to make it appear that the big business man (Reed) was maltreating the little business man (Guthrie).

At Nelson's Request

Excitement over the case grew so hot that Donald Nelson asked the Truman committee to dig to the bottom of it. The resulting report, made public on June 18, reiterates Senator Truman's distrust of dollar-a-year executives. Its findings were so hot that Nelson tried to prevent their publication, fearing harm to the war effort. Later some of the sting was taken out of the report by statements from members of the committee itself. Senators Lucas, of Illinois; Connally, of Texas, and Burton, of Ohio, noted that the situation in war production is much better now than formerly. Senator Lucas said WPB was doing a "magnificent job." Senator Burton commended Donald Nelson for greatly increasing the war output and added that the committee's chief hope was to make possible an even better showing by pointing out past mistakes—sentiments in which Truman concurred.

The Truman committee findings generally upheld Guthrie. Reed and J. S. Knowlson, director of WPB's

Division of Industry Operations, who is on leave as a dollar-a-year man from his regular post as chairman and president of Stewart-Warner Corp., were mentioned personally. Briefly the committee charged: that Mr. Reed "did not take the necessary action to obtain the maximum conversion of private industry to war production in the shortest possible time"; that Mr. Knowlson took effective action to speed conversion after the Guthrie resignation but he should have investigated before that to find out who was responsible for delays.

The committee decided that the serious immediate difficulty was the lack of a comprehensive plan to absorb into war work the men, machines, and materials taken off civilian industries. It listed as three vital needs (1) development of an over-all plan for maximum war production, (2) removal of dollar-a-year men from positions where they make decisions affecting their own industries, and (3) the giving of greater responsibility to small business, labor, and "independent-minded production engineers."

Shots at "Big Business"

An earlier conclusion of the committee was repeated—that the war effort has been hampered by the extent to which OPM and WPB personnel had been drawn from "the big business groups." It added:

"Many of the large industrialists are, of course, men of unquestioned capacity; and the overwhelming majority are possessed of patriotism and integrity. The attitudes and associations which these men have acquired through the years, however, make it undesirable to rely upon them exclusively for the direction of the war production program." There was a specific demand for tying the small businessman closer into the war effort.

It is worth noting that, in no instance has the Truman committee charged the dollar-a-year man and his associates with graft or dishonesty. What it objects to are his connections and the "subconscious inclinations" which can influence his actions.

Exploring the Subconscious

This is an amplification of points made in a Truman committee report of last January 15. Then the committee believed "that most dollar-a-year and WOC men are honest and conscientious and that they would not intentionally favor big business nor their own companies." But it feared "their subconscious tendency, without which they would hardly be human, to judge all matters before them in the light of past experiences and connections." It referred to the oft-repeated statement that the actual letting of contracts is up to the Army and Navy and not the WPB, but it asserted that dollar-a-year men could substantially benefit their companies just the same.

The reasoning in the report ran like this: Such men familiarize themselves with government plans and contracts, can let their companies know how to obtain consideration. They can advise their employers on how to build up inventories, how to phrase requests for priorities in order to obtain early consideration. Also they are often close friends of the men who do pass on contracts in which their companies are interested. Thus the loan of dollar-a-year and WOC men from companies with large war contracts is to be definitely condemned. Such men should go on government salary, entirely disassociate themselves from their company jobs, and should have no commitments for reemployment after the war by their companies.

Much of the bite is taken out of the Truman report by



An important part of the job—long conferences with representatives of industries that must be geared to war conditions. In this case, it's the can manufacturers who have

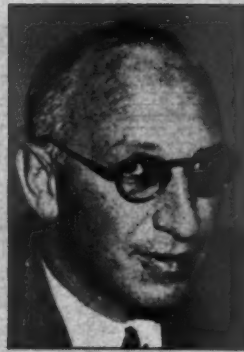
come to a Washington War Production Board meeting, presided over by Douglas Kirk (in light suit at end of the table), Chief of the WPB Container Branch.



Mouldeur Hudgins



W. H. Harrison



L. J. Rosenwald



Wendell Lund



T. Spencer

Division and Bureau heads hold the key jobs in the War Production Board. These five are (from the left) the Acting Director of the Purchases Division, the Director of the Production

Division, the chief of the Bureau of Industrial Control, the Director of the Labor Production Division, and the chief of the Bureau of Industry Advisory Committees.

the findings of the Faddis Committee of the lower house of Congress, published two days earlier than those of the Senate group. These represent the conclusions of a special committee on matériel procurement of the House Committee on Military Affairs, headed by Representative Charles I. Faddis, of Pennsylvania. Taking up the Guthrie charges and other matters examined by the Truman group, the Faddis Committee findings were that:

There was no proof that dollar-a-year men against whom Guthrie made his charges "intended to serve any interest other than that of the government";

In war times like this it is impossible to depend on government career men, college professors and others without practical experience but that these men needed the assistance and specialized knowledge of high-caliber business executives and technicians;

While sympathetic to Guthrie's concern for immediate curtailment of civilian production, the committee felt that he largely disregarded the collateral consequences (such as maintenance of skilled production staffs) surrounding conservation and conversion.

Donald M. Nelson in his "high and responsible office" must necessarily rely on the judgment of department chiefs and the committee "deplored the publicity attendant upon Guthrie's resignation and charges which have attracted far greater attention than they justify."

Nelson Makes It Clear

In commenting on the Truman report, Nelson made it clear that he backed Reed, one hundred per cent. His formal statement said:

"During the past five months American industry has been converted from peace to war. Mistakes have, of course, been made. But the record of the War Production Board speaks for itself. The production we are getting is due to the teamwork of many able men. Mr. Reed is entitled to full credit for his participation in this work. I have full confidence in him and sincerely hope that he will continue his valuable assistance in the war effort as long as he can do so."

Insistence on separating the dollar-a-year man from his parent industry has created one of the most baffling problems in WPB procedure. It led Nelson to issue his famous Administrative Order No. 4. This rule, put into effect February 10, provides that no dollar-a-year man shall be appointed to a position in which he must make decisions affecting the company from which he came. In addition, no individual can be employed on a salary or dollar-a-year basis as a branch or section chief who will have jurisdiction over the industry from which he came. The problem which the rule is designed to solve affects particularly the industry branches of WPB, the board units that are closest to the specific industries involved in the war program. A strict adherence to a policy of heading these agencies with men totally unfamiliar with conditions in the field of their activity could be pretty confusing.

Baruch Speaks Out

Bernard M. Baruch, head of the War Industries Board in 1918 and by virtue of his record the elder statesman of the present war production effort, is careful of his comment as he wanders in and out the offices in Washington. Usually he won't say anything if he can't be complimentary to the present drive. But the idea of separating executives from the industries with which they are familiar is one of the heresies he deplores by indirection.

"That subject came up in the last war," he remembers, "and you know what I told the investigating committee? I told 'em I'd be damned if I was going to let a shoemaker run the lumber business."

Actually the present situation isn't as bad as such heresy might make it. When an outsider is appointed there is always a specialist somewhere down the line who can guide the branch chief's steps. Moreover, the WPB chairman refuses to be bullied by his own ruling. Says Mr. Nelson:

"Remember, I issued Administrative Order No. 4. If it doesn't work out properly I can change it."



I. Henderson

Philip D. Reed

L. Edward Scriven

J. S. Knowlson

Arthur B. Newhall

top man in WPB handles a section of the big job. These (from the left) the Director of the Materials Division, of the Bureau of Industry Branches, Chief of the Bureau of Field Operations, Director of the Division of Industry Operations, and (in a highly-specialized raw materials post) the Director of the Office of the Coordinator for Rubber.

That is the way Baruch and Nelson's other friends like to hear him talk. For Bernie Baruch found in the other war that the best way for a business leader to negotiate Washington politics was to obtain centralized authority, keep his hands clean, accept all responsibility for the acts of subordinates, speak up strongly and to the point.

He Was There Before

Still a straight six-footer at 72, Baruch has had more to do with the current war production drive than most observers realize. Only recently (May 30) did he get any formal appointment in the campaign. He was then made advisor to the Army ordnance chief, Major General Levin H. Campbell, Jr.—a job with informal duties and not even a dollar-a-year compensation. But if Baruch is disappointed because President Roosevelt didn't give him a high post he never lets on. Meanwhile the doors of the White House open to him and from his apartment in the Carlton Hotel, he roves at will through government offices listening to problems, smoothing irritations, handing out advice, telling pertinent stories.

"Me?" he says, "Why, I'm just an old alley cat. I wander from place to place. Every now and then somebody gives me a plate of milk or scratches my back." His office is "a bench in Lafayette Park."

He recalls the trouble he had establishing his position and authority as head of the War Industries Board of 1917-18. Baruch had made his millions in Wall Street and his appointment scandalized many elements, including the chambers of commerce. He took the breath of a congressional committee by the bland admission that his business was speculation. And he floored them a second time by explaining that a speculator prospered by figuring out what was going to happen in the future and investing his money accordingly.

"When Woodrow Wilson first called me to Washington," Baruch relates, "he described the job as he saw it and then he said, 'Bernie, we've got to get a conspectus.' I said, 'That's right, Mr. President, we can't do anything until we get a conspectus.' I left and, as I was going down

the hall, I met Herbert Bayard Swope. 'Herbert,' I said, 'what the devil is a conspectus.' 'A conspectus,' said he, 'is a complete general view; a summary.' And I soon found that a conspectus of war requirements was a mighty handy thing to have. The men running the present production job have got their conspectus now."

Temperamentally Baruch and Nelson are opposites. Baruch is mentally fast on his feet, loves to play with ideas, is quick to laugh and joke. Nelson's big bulk sits solidly and his remarks carry an impression of heavy honesty. The volatile Baruch served as a foil to the granite steadiness of the scholarly Wilson. And Nelson's solidity steadies the mercurial Roosevelt. Coming from a stormy session in the WPB chairman's office, one dollar-a-year man observed with awe:

"The hotter things get in there, the cooler Nelson becomes."

There is another difference between the two which is typical of their two eras. Baruch was a capitalist—a man who had made himself immensely wealthy by analyzing the trends of corporations and of the times. Nelson has been a hired man whose income was his company salary. Baruch notes that there are fewer "bankers' men" in this war than in the last, that the WPB officials are mostly fresh from active management jobs.

A Truman Point

There is a direct relation here to a point which was hammered hard by the Truman committee when it had dollar-a-year men on the stand. In support of its conviction that business men should resign from their companies and take smaller government salaries, its members maintained that a company executive ought to accept the sacrifice involved since the men who were fighting the country's battles were drafted at \$21 a month.

Business men made a weak showing in their rebuttals because they depended mostly on generalities and were not specific in showing why they could not get along on what the government could pay. Usually they explained that their standard of living had been established at such

a high rate that they couldn't meet fixed personal obligations on government pay.

These are two-dollar words that are perfectly understandable to people in business but they convey no definite picture to our old friend, the man in the street. Appearing in cold type, without A-B-C explanations they certainly appeared to the general public as an insufficient defense. Thoughtful men in Washington feel that the dollar-a-year witness might have done much better had he presented his case something like this:

In adjusting their living to the standard of their salaries, business executives inevitably enter into certain contracts which have to be met. Since many of these men depend entirely on their salaries (rather than on income from investments) they have taken out heavy life insurance policies to protect the future of their families. A number of dollar-a-year men spend around \$10,000 a year on insurance premiums—and \$9,000 is the most they can get from the government without a special Congressional dispensation. Those living in New York and other big cities also are tied-up with expensive apartment leases; annual rentals of \$3,600 are commonplace. Then there may be a boy in college or even an ex-wife who must get her alimony. And the income tax question can't be dodged—how to pay the tax on a big company salary earned one year out of a small government salary earned the year following.

Things Left Behind

Other considerations are important, too. When an executive leaves his company job to come to Washington there is the threat of his losing his seniority rating, which is an accepted foundation for promotions; also of impairing his pension status. Moreover, in the battle for place, there is always some ambitious youngster behind him who would cultivate the absence of a superior to further his own interests.

But why couldn't the company which loans the man to Washington make definite provision to protect his position while he is serving in Washington?

Because Congress wouldn't sanction it. The Truman committee has gone on record as opposing any company agreement to reemploy executives loaned to the war drive and placed on full government salary. It is the committee's way of saying that the break must be clean and complete,



Between Nelson's private office and WPB's reception room, the hard-working secretaries stand united.



"Tempo R," built for the duration. It pushes out the industry orders and pulls in the Washington heat.

with no strings dangling. The Truman group certainly would oppose any arrangement through which pension and seniority rights would be maintained by the executive's company, since any provision of this sort would imply a definite obligation of reemployment.

The business executive exposes himself reluctantly to the fangs of the Washington political jungle. Its customs are as strange to him as those of Tanganyika and he has been told that it is inhabited by ferocious New Deal tribes who would as soon yank out his gizzard as peel his scalp.

Facts belie the suspicion, a hold-over from World War gossip, that the dollar-a-year man called to Washington comes a-running because he sees an opportunity to make a killing in speculation or in handsome rewards for sneaking out goodies for his company.

Commonest reply of the man directly approached is, "Let somebody else go to Washington. I can do the war effort more good by sticking with my company and getting out stuff that is needed. It's more patriotic to do that than to go down and get mixed up in the Washington sausage mill."

High-Pressure Stuff

There is a pretty story that Sidney Weinberg, of Nelson's staff, breaks down the unwilling by tremulous arguments on duty. Actually what he usually does is to call the man's big boss and rattle his cardrums with his high and insistent rasp.

"Hey, Listen. I've got to have Joe Blank down here and he won't come because he says he's doing more good where he is. I want you to tell him he's got to come. And no argument. I must have him tomorrow."

Some time the big boss breaks through with an objection about the present political administration and its way of doing things. Weinberg's stock comeback is:

"You've got something more important to worry about than the New Deal. Maybe they are tough in spots. But the point is we've got to win this war. If we don't win, it won't be Washington that'll tell you what to do. It will be Berlin and Tokyo. And how would you like that?"

Because it is Weinberg on the wire and because the company chief knows Weinberg is right, he puts on the pressure and the wanted executive is transferred to the Washington job. Having taken him there by the back

of the neck, the company head may have to use the same kind of compulsion to hold him there in face of strange and outrageous complications which he would refuse to endure otherwise.

Sidney Weinberg is a Nelson assistant, one of whose duties is to enlist executive personnel for WPB. This spectacled, five-feet-and-four inches of tact and toughness, is an ideal hand for the particular type of patriotic body-snatching required by the crisis. Weinberg is a partner in the New York banking house of Goldman, Sachs & Co. on leave of absence and is a director of numerous corporations. Through these associations he is on close terms with a great number of business executives. He was born in Brooklyn and when excited is apt to lapse into Brooklynese terminology. Nothing in Washington daunts this banker who got his first job by riding to the top floor of a 42-story building, and stopping at every door on his walk down until somebody said "yes" to his query of "Want a boy?" (Note: He spent the last World War as a second-class cook in the Navy.)

Weinberg and his agile helper, G. Keith Funston (director of sales planning of the Hygrade Sylvania Co.), do what they can to smooth the way for the newcomers. One new and helpful device was inaugurating the rank of "temporary dollar-a-year man."

Temporary Rank

Before the dollar-a-year man can act for the government he must have his signed appointment and take the oath of office. Formerly J. Edgar Hoover's Bureau of Investigation had to investigate the applicant and turn in a report on him before the appointment to handle so much confidential work could be formalized. The overworked FBI would take two to three months before reporting, which meant the services of an applicant needed for immediate duty were lost for that period.

Now the dollar-a-year man can be appointed and sworn

in at once on a temporary basis. The FBI still makes its searching exploration of the subject's past and he is transferred to a permanent dollar-a-year status when the FBI OK's him—as usually happens, since Weinberg's office normally has a good line on the executive before he is offered a place.

Hoover Wants to Know

Hoover sleuths give every candidate a most thorough going over. They aren't so much interested in whether he keeps a blonde or goes to church on Sunday; but they check up on every piece of evidence as to his business honesty and ability and on his patriotic qualifications. It is up to Weinberg to decide when questionable facts appear in the report. Doubts usually are cleared up by direct questioning of the man or his boss.

In one case the appointment was held up because the FBI report disclosed that the candidate had been heard to say, "Hitler is right." Further examination brought out that the subject was not too keen for the New Deal philosophy; that under the stress of argument (and a couple of Scotch high-balls) he voiced that endorsement of some article in the Führer's creed. But there was no question of his loyalty or his ability and he got the Washington job.

The Weinberg office shrewdly glamorizes the dollar-a-year service. Incumbents aren't allowed to forget that it is open only to those at the top in executive ability. The formal appointment, signed by Nelson, is a fancy document in special script bearing an embossed gold seal of the United States—nice to hang on the wall of your office and to hand down as a war memento for your descendants.

The government check in payment for the annual service at a dollar-a-year also becomes a prized souvenir. These checks are paid at the end of the federal fiscal year (June 30). Somewhere in the vast wilderness of govern-



The Shoreham Hotel's share-the-car-and-save-the-gas party rides to work at WPB headquarters. This trip carried

(left to right) Philip D. Reed, Wallace Flower, Ben Alexander, T. Spencer Shore, and John R. Kimberly.

ment officialdom are meticulous mathematicians who figure to the cent how much is coming to the dollar-a-year official who works a fraction of the twelve months. Thus fragmentary service is acknowledged in checks for 46¢, 79¢ and such-like amounts. Most of the recipients keep their checks for framing and display. They did in the last war, too, and failure of these checks to return to the U. S. Treasury threw the government bookkeeping out of balance, thereby driving a considerable number of painstaking federal auditors to the brink of lunacy. This time a way out is provided. The dollar-a-year payments come from a special fund which returns to the general account if the checks aren't cashed within a certain time limit.

They're Also Compensated

Such small vanities, added to the satisfaction of contributing to the final victory, sustain the transplanted business men during their Washington tribulations. Instead of their comfortable homes they must take what they can get in Washington hotels or apartments, or farther away in Virginia and Maryland. Since many must pay over \$300 a month for their lodgings, the amount received for daily expenses often fails to cover the actual outlay. And this is something that can't be charged to the home company.

Note that the dollar-a-year man has been an important figure in his own corporation—the man who rated the big corner office, with the venetian blinds, the heavy rugs, and the smart secretary who becomes as useful as the right arm. All these must be left behind during the campaign in Washington. In a few instances the dollar-a-year man brings along his secretary. In a great many more cases this jewel has to be left behind to help run things at the home office during the boss' absence. But it must be recorded that the secretaries who work with these men in Washington are as keen a crowd of girls as will be found in any business organization in the country; someone must have picked for the head offices of WPB the cream of the crop of secretaries that has swarmed into Washington from all over the country for these girls have a special qualification that is denied to their sisters in private employ—they are all in civil service and, hence, they know their way through and around the red tape of government.

Car Sharers

Lucky is the WPB man whose office is in the New Social Security Building or the Railroad Retirement Building just across the way. These are new structures with built-in air conditioning and are proof against the Washington temperatures. The nearby Tempo (temporary) R building and others of its type are flimsy compositions that pull in the outside heat.

Transportation to and from work is a twice-a-day problem. The business man transplanted to Washington either leaves his own car at home for his family or finds it impractical for use since rationing does not allow him enough gasoline to negotiate the vast capitoline distances. In addition to patronizing street cars, buses and taxis, WPB executives have formed numerous groups which band together for the cooperative use of cars.

One informal save-the-gas club was organized by John

R. Kimberly, of the Kimberly-Clark Corp., who is assistant bureau chief of the WPB Bureau of Industry Operations. Kimberly bought an aged Zephyr after he arrived in Washington. This car now furnishes regular morning transportation for him, Philip D. Reed, T. Spencer Shore (vice-president of General Tire & Rubber Co. and chief of the WPB Bureau of Industry Advisory Committees), Ben Alexander (President of Masonite Corp. and assistant chief of WPB's Bureau of Industry Branches), A. G. (Duke) Wakeman (of the Fox River Paper Co. and consultant in WPB's Pulp and Paper Branch). On some runs a sixth passenger squeezes in.

Members of the group meet at the Shoreham Hotel each working morning and have breakfast together at the lunch counter. The bus leaves for work at 8 o'clock, sharp. A favorite subject for conferences right now is whether Kimberly's B3 gasoline card will last until the new rationing forms are issued. (For the return trip in the evening everyone is on his own.)

So far there have been few dismissals from WPB for incompetence. Overwork and the threat of nervous breakdowns are more common causes of removals. Main reason for the comparatively low turnover in employment is the care in making the selections. The cause of most dismissals is the completion of short-term assignments or reorganizations, as when Floyd Odlum's contract division was washed up.

Turnover Record

In May the services of 21 permanent dollar-a-year employees were terminated by WPB and 51 new ones were approved. Fifty-four temporary dollar-a-year employees were released (50 through transfer to permanent status) and 83 temporary appointments were made during the month. WOC terminations, including transfer to dollar-a-year employment, numbered 12 and there were 39 new WOC appointments.

Much wholesome soul-searching has accompanied the passage of this troop of business pilgrims through the fires



Canteen conferences help on a dry stint of WPB work. This one involves dollar-a-year men Harry O. King (left), Chief of the Copper Branch, and Edgar H. Hammond, Jr., head of the branch's Allocations Section.



To the sign of the industry branches come the harassed manufacturers. Two WPB men who must deal with their troubles are Frank B. Cliffe, Assistant Chief of the Aluminum and Magnesium Branch, and George L. Carlisle, consultant in the Priorities Section of the Power Branch.

of wartime Washington. They have learned to acknowledge the particular limitations of private business, to respect the intelligence and integrity of numerous government employees both in and out of the New Deal, and to appreciate that running a corporation in which management is responsible to a few thousand stockholders is quite different from running an infinitely complicated government machine whose management is responsible to 132,000,000 citizens. William Levis, chairman of the board of the Owens-Illinois Glass Co., and a dollar-a-year trouble shooter for Nelson, comments strongly on the shortcomings of one class of executives.

Levis on Red Tape

"The business men who fail to work out down here," he says, "are the prima donnas—the bell pushers. This is a vast new organization doing a vast and complicated job and you don't get anywhere pressing a button and telling George to do it. Some of this type have never explored down inside their own company operations and hence never come to know how they are run. There is much red tape in government but there is a lot of red tape in big corporations too, only they don't call it that. The dollar-a-year men who work according to government procedure, instead of trying to fight it, get things done, all right. And we are finding out that men in responsible government positions have plenty on the ball. That goes for practically all who get more than \$4,200 a year."

Similar convictions are voiced by William L. Batt, No. 2 man of the WPB. In private life Batt is the president of SKF Industries, makers of ball bearings. In Washington he heads WPB's Requirements Committee, besides sitting on the British-American Combined Raw Materials Board.

Batt observes: "Yes, there's much red tape in government. But a better name for it is government procedure,

the government's way of doing business. The dollar-a-year man finds that he gets along all right as long as he adjusts his ways to government ways and to the government officials who have to conform to them. Industry executives have learned lots of other things down here. For instance, economists like Robert Nathan, chairman of the WPB Planning Committee, were right in their estimates of materials that would be needed for this war and our men were more often wrong. We were too closely surrounded by the details of our own particular businesses to see the picture as a whole. I've found that these government men, especially the younger ones, will often give you a better and more logical opinion on large problems than will many experienced business executives."

Batt admits that he is enjoying himself in Washington. But he dwells on the WPB heights, several ledges above the storm and travail of the industry branches. It is the industry branch chiefs who must explain to angry or mournful manufacturers why they can't get this or that material. It is these officers of the firing line who toil at long hot miles of desks, their offices indicated by numbers on a wooden post, their conferences a huddle in the open space between the wastebasket, the stenographer, and the next desk. And they grin over their adjustments to government ways.

Take the Loss

Allen F. Danzer, of the Great Lakes Steel Corp., head of the Iron and Steel Scrap Section of WPB, had a typical experience with government expense procedure. He came down on a hurry call and went to work at once. It was 20 days before he was sworn in. When he turned in a \$275 expense account for this period he found he had to take the loss; the government rule is no expenses allowed before the oath of office is taken. Danzer gets home once a month. He recently built a new house in Detroit, paying \$125 to have the lawn put in. If he had been there, he says, he would have done the work himself, saved the money and got the benefit of the exercise. In Washington he sits at a desk from 9 until 6. The only exercise he gets is a little ping-pong at the apartment house where he lives.

Washington Is Like That

A. E. Staley, head of the A. E. Staley Co., Decatur, Ill., is chief of the WPB's Food Branch. He gets a good laugh when anybody sympathizes with his crowded office quarters. "You should have seen my old office," he says. It was on the third floor of the ancient Masonic Temple and there was no elevator. A two-way procession of girls marched through his sanctum all day, since it provided the only entrance to the women's toilet. He hasn't been home for weeks, hears practically nothing about how his own business is getting along.

"Theoretically," says Frank Walton, "I was to get back to my New York business every week. It's nine weeks now since I have been home. Just to show you—a visitor came in the other day and asked me the name of a man whose office is next to mine in New York; I couldn't remember his name, though I had worked with that man for years. That's how this job absorbs your faculties."



Government talks business as Luther Gulick (left), Director of WPB's Office of Organizational Planning and author of WPB reorganization moves (BW—Jun.27'42, p5), has an office lunch with A. C. C. Hill, Nelson aide.

Walton is a partner in a firm that sells textiles and is deputy chief of WPB's Textile, Clothing, and Leather Goods Branch. He survived five reorganizations.

Civil Service Pointers

Regular government executives who work with the dollar-a-year men realize their difficulties and help them over the stony places. At the head of these counsellors is James Robinson, administrative officer, a Civil Service "career man" who is in charge of WPB personnel. Robinson bears down hard on certain points: WPB officials are advised to determine the job before calling a new recruit to Washington, instead of rushing the man to the capital and then having him wait around until his duties are defined. Newcomers should carefully study the guidebooks on government procedure. Adherence to these rules is the only way of getting action and (as Bill Levis observes) you can only get things done with speed by following the guideposts. Robinson says:

"The dollar-a-year man who disregards established government procedure and tries to act directly as he does within his own company is just like the rabbit in one of those Australian anti-rabbit drives. Every time he starts to do something he finds there is a man with a club to knock him down."

A further reminder: Government business can't be run like a private business; the complicated rules have been established principally as a means of safeguarding public interest.

Leon Henderson, head of the Office of Price Administration and director of WPB's Civilian Supply Division, tops the record with:

"I have found that the business executives who adjust themselves most easily to the work here are the purchasing agents. Donald Nelson is an example. These men are experienced in buying a great many items and they merely change bosses—from private corporations to the U.S. government. The question of dual loyalty isn't raised against them."

He noted that dollar-a-year men who adjust themselves to government ways get things done faster than civil service employees and added that in Washington the busi-

ness executive has to stand on his own feet in an argument and prevail over the government executive by his own powers, it isn't like being the head of a big company with authority to issue unquestioned orders. From the mutual exchange in Washington, Henderson believes, the business man will take back home a wider view of economics, including the realization that production should follow demand, that if you insure purchasing power, production follows automatically.

After the last war people marveled that such a loose and sprawling organization as Baruch's War Industries Board had accomplished so much. A terse explanation is given in Grosvenor B. Clarkson's book, "Industrial America in the World War":

"Manning the War Industries Board, led by a man with a touch of genius, they [the business executives] bridged with the personal element all its organic lapses and filled with intelligent initiative all hiatuses in power."

And that explanation might be applied to what the War Production Board of this conflict has accomplished in spite of all the duplication, interference, delay, division of authority, and friction that inevitably beset this kind of an emergency job. The results obtained by the dollar-a-year man and his associates in this cooperation of business with government are there for the world, and the Axis in particular, to ponder. Production lines that outdistanced all foreign peacetime competition are now pouring out a flood of weapons that has already surpassed enemy production.

What the Figures Show

The significant figures are those cited in an editorial in these pages (BW—Jun.27'42,p44) by James H. McGraw, Jr., President of the McGraw-Hill Publishing Co.:

"The 1941 war production of the United Nations, exclusive of the United States, equaled the total 1941 war output of Germany with all of its captive plants and enslaved labor. Since Germany's 1941 operations were at maximum capacity, no further increase is possible. Britain's output has been expanding to the point where its 1942 production is considerably ahead of Germany's."

"In May, 1942, American war production passed the British output 50 days ahead of schedule. In 1943, it will be three times that of the British."

Such figures tell the story for "Don Nelson's men," as well as for American industry.

REPRINTS AVAILABLE

"Don Nelson's Men" is one of a series of special Reports to Executives on current events, opportunities, problems, and trends of major significance to business. It is covered under the general copyright on the July 4, 1942, issue of Business Week. Copies will be available in reprint form at 20¢ apiece. Requests for reprints should be addressed to:

Willard Chevalier, Publisher,
Business Week,
330 West 42nd Street,
New York, N. Y.

DOLLAR-A-YEAR MEN IN WPB

Technically, not all of these business executives in the War Production Board are dollar-a-year men, either "permanent" or "temporary" (the latter meaning too newly appointed for the busy Federal Bureau of Investigation to have completed the checkup that every appointee must undergo—his first Washington investigation). A large number of what the general public knows as dollar-a-year men are actually "WOC men." The initials stand for "without compensation"—of even a dollar a year. The WPB executives in this category serve as special consultants without any administrative

authority. But many "WOC men" are graduated into the dollar-a-year class.

Numerals in parentheses after the names in the three WPB business executive groups listed on this and the next three pages indicate the divisions in which the executives serve, as follows: (1) Industry Operations, (2) Purchases, (3) Materials, (4) Labor, (5) Civilian Supply, (6) Production, (7) Bureau of Industrial Conservation, (8) Office of Chairman, (9) Administrative, (10) New York Regional Office, (11) Statistics. All names listed appeared on WPB's rolls on June 4, 1942.

PERMANENT DOLLAR-A-YEAR PERSONNEL

Alexander, Ben (1)
Pres., Masonite Corp.
Alijan, George W. (2)
Calif. & Hawaii Sugar Refining Corp.
Allen, Rolland C. (3)
Exec. V.P., Ogilby Norton & Co.
Arthur, George (4)
Vocational Dir., Champion Paper & Fibre Co.
Austin, David F. (3)
V.P., Carnegie-Illinois Steel Corp.
Baker, Orrin H. (3)
Carnegie Steel Co.
Ball, Ralph Henry (3)
Asst. technical dir., Celluloid Corp.
Bancroft, Thomas M. (1)
Treas., Turner-Halsey Co.
Banfield, Thomas H. (1)
Collins & Banfield
Barry, Constantine (3)
Rate Research Engr., Philadelphia Electric Co.
Bates, Walter S. (5)
Gen. Commercial Mgr., New York Telephone Co.
Batt, William L. Sr. (3)
Pres., S.K.F. Industries
Baum, Morton J. (1)
Asst. to Pres., Hickey-Freeman Co.
Baxter, John L. (1)
H. C. Baxter & Brother
Bean, Wyndham R. (6)
Retired
Beardslee, Clyde E. (1)
V.P., Borden Co.
Bell, Frank B. (6)
Pres., Edgewater Steel Co.
Bemis, John H. (3)
Rep. for pig iron sales, Pickands Mather & Co.
Berquist, Charles W. (4)
Dir., Public Relations, Hawthorne Works, Western Electric Co.
Bickle, Benjamin H. (6)
Gleason Works
Bistrup, Frank V. (4)
Sec., Industrial Dept., Associated Industries of Mass.
Blank, Earl F. (4)
Personnel Relations Dir., Jones & Laughlin
Block, Joseph L. (3)
Exec. V.P., Inland Steel
Boeddinghaus, Hugo (1)
American Felt Co.
Bogart, Guy B. (4)
V.P., Indian Refining Co.
Bornhofen, Lee J. (6)
Mgr., Sales Promotion Dept., Goodyear Tire & Rubber
Bosch, Lester L. (3)
Asst. in charge, General Engineering Section, Columbia Engineering Corp.
Boyle, J. Raymond (2)
Prudential Insurance Co.
Brace, Maxwell (3)
Pres., Brace-Miller Huntley, Inc.
Brainard, George C. (6)
Pres., General Fire-proofing Co.
Brandt, Edgar C. (6)
S.M., Westinghouse
Brett, Alden C. (2)
Treas., Hood Rubber Co.
Bromley, John E. (1)
Treas., John Bromley & Sons
Brorain, Carl David (1)
Pres., Peninsular Telephone Co.
Brower, John M. (1)
Pres., Brower Furniture Co.

Brown, Francis P. (3)
Pickands, Mather & Co.
Browning, Edward J. (3)
General partner, George H. McFadden & Brother
Bruhn, George John (2)
Royal Liverpool Group Co.
Bryant, H. W. (3)
Expeditior, Engineering and Construction Dept., Youngstown Sheet & Tube
Bunker, Arthur H. (3)
Exec. V.P., Lehman Corp.
Byron, Joseph W. (1)
Pres., W. D. Byron & Sons
Cabot, F. Higginson (3)
Pres., General Public Service Corp.
Cabot, Paul C. (7)
V.P., State Street Investment Corp.
Camman, Eric A. (2)
Partner, Peat, Marwick, Mitchell & Co.
Carlisle, George L. (3)
Design & Sales Engr., to Mgr. of Sales, Railway & Industrial Engineering Co.
Carlisle, Henry C. (3)
Independent consulting mining engineer
Carpenter, Arthur W. (7)
B. F. Goodrich
Carpenter, O. F. (4)
Principal of Wright Vocation School
Carson, Ellis A. (2)
Sunbeam Manufacturing Co.
Chapman, Edmund S. (6)
V.P., Plymouth Div., Chrysler Corp.
Childress, Wade (1)
Pres., Columbia Terminals Co.
Cisler, Walker L. (3)
Asst. Chief Engr., Public Service Electric & Gas Co.
Clark, Francis R. (1)
V.P., Plymouth Cordage Co.
Clements, Harvey (1)
Bemis Brothers Bag Co.
Cliffe, Frank (3)
Asst. Comptroller, General Electric Co.
Cole, Melvin W. (3)
Bethlehem Steel
Coler, Carl S. (4)
Member, Industrial Relations Div., Westinghouse Electric Mfg. Co.
Coleman, Jacques (1)
Partner, Coleman & Co.
Connett, Harold (1)
Pres., Surpass Leather Co.
Conover, William (4)
Asst. Dir., U. S. Steel Corp. of Delaware
Coonley, Howard (7)
Chairman of Board, Walworth Co.
Curtlett, John N. (1)
V.P., McCormick & Co.
Dalton, Harry L. (1)
American Viscose
Dambly, Harold A. (6)
Philadelphia Electric Co.
Danzon, Alan F. (3)
Scrap buyer, Great Lakes Steel Corp.
Davis, J. B. (3)
V.P., Inter-Chemical Corp.
Day, William (1)
Public Relations Supervisor, American Tel. & Tel.

DeBell, John E. (3)
Monsanto Chemical Corp.
Dexter, Oakley W. (2)
Dir. of Purchases, Crown Zellerbach Corp.
Dignam, Thomas (4)
Pres., Preservation Products, Inc.
Dodge, H. W. (3)
V.P., The Texas Co.
Dunbar, Howard (6)
V.P., Norton Co.
Duncan, Russell C. (1)
Pres., R. C. Duncan Co.
Dunn, Joseph V. (6)
Engr., American Tel. & Tel.
Dyer, Arthur J. (1)
Pres., Nashville Bridge Co.
Edwards, Robert Stafford (8)
Pres., Edwards & Co.
Einig, A. B. (6)
Motch & Merryweather Co.
Eisemann, Sidney A. (5)
Dir., Eisemann, Inc.
Ellingson, James W. (1)
Traffic Mgr., N. Y. Div., California & Hawaiian Sugar Corp.
Engelsted, Knud (6)
V.P., Nova Tool Co.
Ewing, William F. C. (1)
V.P., Alexander Smith & Son Carpet Co.
Evans, Frank B. (6)
V.P., Bell Telephone Co. of Penn.
Falck, Edward (3)
Special Asst. to V.P., Consolidated Edison Co.
Farrell, Christopher C. (3)
Supt. of Planning, Philadelphia Electric Co.
Fawcett, Mahlon (6)
Supt. of Mfg., Westinghouse Co.
Fenner, David C. (1)
Mack Intl. Motor Truck Corp.
Fitzhugh, William W. (1)
Pres., Wm. W. Fitzhugh, Inc.
Flickinger, Burt (1)
Pres., S. M. Flickinger
Foley, John (2)
Forester, Pennsylvania Railroad
Fowler, Neil A. (2)
V.P. and Dir., General Box Co.
Foy, Norman W. (3)
G.S.M., Republic Steel
Frank, William Klee (6)
Chairman of the Board, Copperweld Steel Co.
Gadsby, George M. (1)
Pres., Utah Power & Light
Gamble, Jefferson (1)
Asst. to Pres., Associated Spring Corp.
Gardiner, Glenn (4)
General Asst. to Pres., Forstmann Woolen Co.
Gates, Thomas S. (1)
Pres., University of Pa.
Gay, Frazier W. (3)
Consultant, Electrical Engineering, Public Service Electric & Gas Co.
Gilbons, George C. (7)
Assn. Midcontinent Oil & Gas
Glueck, Isadore (7)
American Smelting & Refining Co.
Goodnow, Russel (1)
Pres., Machine Parts Corp.
Gray, Daniel M. (3)
V.P., Stoner-Mudge
Greenman, Russell L. (4)
Brooklyn C. of C.

Gries, George (3)
V.P., Great Lakes Steel Corp.
Grothe, Oscar (4)
V.P., White Sewing Machine
Hall, John J. (1)
V.P., American Radiator & Standard Sanitary Mfg. Co.
Hallenborg, C. E. (6)
V.P., Dictaphone Corp.
Hamilton, J. Howard (2)
Mgr. of Sales, American Can Co.
Hammond, Edgar H. (3)
Dist. Mgr., Kennecott Wire & Cable Co.
Hannon, George (1)
Frank G. Shattuck Co.
Hardy, Phillip S. (1)
Pres., Hardy Furniture Co.
Hargate, J. Walden (3)
Dir. of Purchases, Granite City Steel Co.
Harris, Arthur L., Jr. (1)
Atlanta Paper Co.
Harrison, William H. (6)
V.P., American Tel. & Tel.
Harvey, Dean (7)
Materials Engr., Westinghouse El. Mfg.
Hawkins, Lester (6)
Dist. Mgr., Warner & Swasey
Hawthorne, L. E. (2)
J. C. Penny Co.
Hays, David (6)
Commercial Engr., Appliance Div., General Electric
Hayes, Frederick A. (1)
American Hide & Leather Co.
Helburn, Willard (1)
Willard Helburn, Inc.
Herndon, Lewis (1)
Belknap Hardware & Mfg. Co.
Heron, Alex B. (4)
Dir., Industrial & Public Relations, Crown Zellerbach Corp.
Hester, E. A. (3)
Supt., System & Planning, Duquesne Light Co.
Hitchcock, Harry (6)
Southern California Tel. Co.
Hofmann, Max H. (3)
Sales, Lukins Steel Co.
Hocker, George F. (3)
Mgr. of Sales, Castings, Forgings, Bethlehem Steel
Holley, Edward (3)
V.P., Semet-Solvay Corp.
Honeycutt, Jesse (3)
Asst. V.P., Bethlehem Steel
Hoose, Donald (4)
Asst. Mgr. of Industrial Relations, Texas Co.
Hopkins, William M. (4)
Columbia Pictures Corp.
Hornor, O. A. (3)
Dist. Power Specialist, General Electric Co.
Houghton, Amory (1)
Corning Glass Works
Howe, Arthur (1)
V.P., Ludlow Mfg. Assoc.
Hurley, John A. (1)
G.S.M., Nineteen Hundred Corp.
Hyer, Allan (1)
Black-Clawson Co.
Jackson, Lewis B. (1)
Intl. Shoe Co.
James, William L. (2)
Purchasing Agent Stanolind Oil & Gas Co.
John, Carl F. (3)
Wisconsin Electric Power Co.

Jones, Chandler (3)
Asst. Electrical Design Engr.,
New England Power Service Co.
Jones, Fred (1)
Ford Dealer
Jones, Henry W. (4)
Mgr., Industrial Relations, Atlantic
Refining Co.
Johnson, E. F. (6)
Retired, formerly with General
Motors
Kahler, William V. (6)
Chief Engr., Illinois Bell Tele-
phone
Kalberer, K. H. (8)
Lorr Laboratories
Kane, Michael (4)
Staff Engr., American Tel. & Tel.
Kanzler, Ernest (1)
Pres., Universal Credit Co.
Kerber, William (3)
S.M., Hanna Furnace Corp.
Kella, Charles F. (3)
Sales Engr., West Penn. Power
Co.
Kelday, George J. (4)
International Harvester
Kimball, Dexter (6)
Professor Emeritus of Mechanical
Engineering, Cornell U.
Kimberly, John R. (1)
Kimberly Clark Corp.
King, Clark W. (3)
Research Engr., Bethlehem Steel
Kirk, Douglas (1)
Asst. to V.P., Quaker Oats Co.
Kirk, George (4)
Colorado Fuel & Iron Corp.
Knowlson, James S. (1)
Pres., Stewart-Warner Corp.
Krafft, Fred (4)
American Viscose
Landry, George A. (6)
Western Electric
Lanier, George H. (1)
V.P., J. B. Warner, Inc.
Le Baron, Robert (5)
Virginia Smelting Co.
Leithhead, Barry T. (1)
Mgr., Cluett, Peabody & Co.
Leppart, John C. (3)
Asst. Dir. of Sales, Pittsburgh
Plate Glass Co.
Levis, William E. (8)
Chairman of the Board, Owens-
Illinois Glass Co.
Lippert, Arnold (1)
Chemical Dir., Joseph Bancroft &
Sons
Loew, Edgar (1)
Dean of College of Engineering,
U. of Washington
Low, Jerome (1)
Associated with law office, Nor-
man A. Meyers
Luhra, Albert W. (2)
Pres., Containers Testing Labora-
tory
Lumpkin, Richard Adamson (1)
Pres., Illinois Consolidated Tele-
phone Co.
Lustenberger, Louis C. (2)
V.P., W. T. Grant Co.
Lynde, Carl M. (6)
Asst. Mgr., Bridgeport Plant, Gen-
eral Electric
MacKeachie, Douglas (2)
Purchasing Dir., Atlantic & Pa-
cific Tea Company
MacNeil, John L. (2)
V.P., First National Stores
MacPherson, James (2)
California, Arabian Standard Oil
Co.
Manderson, Harold (2)
Supervisor of Purchases, Continen-
tal Can Co.
Marble, Robert A. (3)
Mgr. Sales Engineering, Carnegie
Illinois
Marcus, H. Stanley (1)
Nieman-Marcus
Martin, Lawrence (1)
Asst. to Pres., Thomas A. Edison,
Inc.
McCarty, George W. (3)
Ashcraft Wilkinson Co.
McDaniel, J. E. (4)
Dir., Cooperative Plan of Educa-
tion, Georgia School of Techno-
logy
McIntyre, B. D. (6)
Monroe Auto Equipment Co.
McKendrew, Edward L. (1)
Armond Schmoll, Inc.

McKinney, Thomas (1)
V.P., American Yarn & Process-
ing Co.
McQuaid, Harry (3)
Metallurgist, Republic Steel
Meigs, Merrill (6)
Publisher, Chicago American Ex-
aminer
Mellon, George E. (3)
Industrial Engineer, American
Rolling Mills
Mertz, Paul A. (4)
Dir., Company Training, Sears
Roebuck
Meyer, Edwin R. (1)
Central Brokerage Co.
Meyer, Emanuel (4)
C. H. Musselman & Co.
Meyers, Herbert H. (3)
Mgr., Purchasing Dept., Virginia-
Carolina Chemical Corp.
Miller, Alex (3)
J. Miller Co.
Miller, Kenneth W. (3)
Dir. of Research, Consolidated
Edison Co.
Mitschrich, Melville (3)
V.P., Maloney Electric Co.
Monrad, C. C. (3)
Associate Professor, Chemical En-
gineering, Carnegie Institute of
Technology
Mooney, Paul (4)
G.M., Public Relations & Per-
sonnel, Kroger Grocery & Bak-
ing Co.
Moore, John E. (3)
Operating Consultant, Ebasco Serv-
ices
Moorhead, Joseph E. (7)
Exec., Penn. Grade Crude Oil
Assn.
Morison, John R. (2)
V.P., International Harvester
Mullally, J. W. (3)
V.P., Defense Dept., Anaconda
Wire & Cable Co.
Mumma, Morton Claire (1)
Retired, formerly with Sears Roebuck
Muth, George (1)
Continental Can
Nelson, Henry P. (1)
International Harvester
Nesbitt, James W. (6)
Factory and assistant works mgr.,
Chrysler Corp.
Newhall, Arthur (1)
Exec. V.P., Talon, Inc.
Nichols, Thomas S. (3)
V.P., Prior Chemical Corp.
Nichols, William L. (3)
Managing Editor, "This Week
Magazine"
Odum, Floyd B. (8)
Pres., Atlas Corp.
Ohmer, Albert A. (3)
Sales Engr., Erie Forge Co.
Olander, Milton (4)
Personnel Dir., Owens-Illinois
Glass Co.
O'Leary, A. J. (3)
Asst. G.M., Lukens Steel Co.
Olrich, Ernest L. (4)
Pres., Munsingwear Corp.
Osterhout, Harold (9)
Asst. V.P., National City Bank of
N. Y. City
Pace, Dudley H. (1)
John Deer Plow Co.
Parr, Charles (1)
Pres., Parr Electric Export Corp.
Paterson, Albert B. (1)
Pres., New Orleans Public Service
Co.
Peloubet, Maurice (2)
Pogson, Peloubet Co.
Penrod, Alphon (6)
Western Electric
Peterson, William C. (3)
Asst. Electrical Engr.
Petrikin, William (1)
Chairman of Board, Great Western
Sugar Co.
Porter, J. Roy (6)
Pres., Marshall & Hushbert Ma-
chinery Co.
Porter, Robert (3)
Dir. of Purchases, Provident Trust
Co.
Procter, James W. (1)
Sales Exec., Wellington-Sears Co.
Protheroe, Howard P. (7)
Goodyear Tire & Rubber
Rapelye, H. A. (3)
Business Mgr., Continental Can

Reber, Hugh J. (9)
V.P., Fiduciary Trust Co.
Reed, Philip D. (1)
Chairman of Board, General Elec-
tric
Reinartz, P. M. (3)
Technical Counsellor, Armco Inter-
national Corp.
Reuter, Irving (1)
Retired, formerly Pres., Olds Mo-
tor and Buick Motor
Roberts, George I. (3)
United Carbon Co.
Roberts, W. Frank (1)
Pres., Standard Gas Equipment
Corp.
Romaine, Millard (6)
G.S.M., Cincinnati Milling Co.
Roper, Elmo B., Jr. (2)
Elmo Roper Marketing Research
Rosenwald, Julius, II (7)
Sears-Roebuck
Rosenwald, Lessing J. (7)
Chairman, Board of Dir., Rosen-
wald Fund
Rutherford, Gordon S. (3)
Pres., New England Concrete Pipe
Corp.
Sampson, C. L. (6)
Northwestern Bell Telephone
Sandmaier, Philip (3)
Asst. Mgr. of Orders, Republic
Steel
Sands, Edward F., Jr. (6)
V.P., Robinson, Cary & Sands Co.
Sands, John W. (7)
Int'l Nickel
Sauer, Howard C. (6)
Timken Roller Bearing
Savage, Porter (2)
Consolidated Edison
Schoenlaub, C. M. (1)
Republic Steel
Scott, George C. (1)
Minnesota Valley Canning Co.
Seatre, William E. (8)
Senior Partner, Price-Waterhouse
& Co., Continental Office
Sedgwick, Donald (3)
Asst. to V.P., Kansas Power &
Light
Sheldon, Charles L. (2)
Purchasing Agent, Hood Rubber
Co.
Shepard, N. A. (6)
American Cyanamid
Shepard, Roger B. (1)
Pres., Finch, Van Slyck & McCon-
ville
Shireman, John (1)
Div. Merchandise Mgr., Montgom-
ery Ward
Shore, T. Spencer (1)
V.P., General Tire & Rubber
Simons, George W., Jr. (1)
General municipal engineering and
planning practice
Smith, C. E. (2)
V.P., New York, New Haven &
Hartford R. R.
Snobberger, Rantz E. (7)
Pyramid Coal Corp. and Binkley
Coal Co.
Solomon, Leonard (5)
Owner, Victor Furniture Co.
Spring, A. J. (1)
Shoe Buyer, J. C. Penny Co.
Squires, Irving (1)
V.P., Cohen, Cohen, Goldman &
Co.
Stanley, Gilbert (8)
Metropolitan Life
Starkie, Thomas (3)
V.P., Wisnack-Tumpeier, Inc.
Stayman, Ralph J. (3)
Carnegie-Illinois
Stedfast, Albert (6)
V.P., Stedfast & Roulston, Inc.
Stern, Edgar B. (1)
Retired, formerly Lehman-Stern &
Co.
Stevens, Ames (1)
V.P., Lawrence Mfg. Co.
Stevens, R. S. (2)
Mgr., Farm Equipment & Heavy
Machinery Div., Montgomery
Ward
Stone, Franz (6)
Pres., Columbus McKinnon Chain
Corp.
Stoughton, Bradley (6)
Professor of Metallurgy, Lehigh U.
Sutherland, George (7)
Mgr., General Store, Consolidated
Edison
Sykes, Howard (3)

Chairman of Board, Eugene Mac-
sell & Co.
Symonds, Nathaniel (1)
Retired, formerly Westinghouse
Electric
Thayer, Philip (1)
Hanson-Godman Co.
Thompson, Charles L. (1)
Thompson, Sanders & Ginocchio
Thurston, A. Henry (7)
Asst. S.M., Albany Felt Co.
Timmons, John (6)
V.P., Philco Corp.
Toulouse, Julian H. (1)
Townson, Douglas C. (1)
Pres., Curtice Brothers Co.
Uebelacker, David (3)
Engineer, Ford, Bacon & Davis,
Inc.
Upton, Louis C. (1)
Pres., Nineteen Hundred Corp.
Van Cleef, Frank C. (1)
Van Cleef, Jordan & Wood
Van Vleet, H. S. (7)
American Can
Vaughn, William E. (2)
Sales Dept., American Can
Vigor, Frank (3)
General Transportation Mgr.,
American Rolling Mills
Von Daacke, James (3)
Asst. S.M., American Brass Co.
Voorhees, Stephen (6)
Voorhees, Walker, Foley & Smith
Wagner, A. A. (3)
Mgr. of Sales, Hot Rolled Prod-
ucts, Jones & Laughlin
Wakefield, John (7)
Hawkrige Brothers Co.
Walker, Alex (1)
Pres., The Nat'l Supply Co.
Walton, Frank (1)
V.P., Catlin Farish Co.
Warwick, Charles L. (7)
Sec.-Treas., American Society for
Testing Materials
Watkins, A. Rush (1)
Sec. and Treas., Ready Foods Co.
Watkins, Donald (3)
Pres., Steel Publications, Inc.
Ward, John H. (1)
Office of Financial V.P., Common-
wealth Edison Co.
Weinberg, Sidney J. (8)
Partner, Goldman-Sachs, Co.
Weidlein, Edward C. (3)
Dir., Mellon Institute
Westberg, George (1)
Pres., Berkshire Fine Spinnings
Assoc., Inc.
Wheeler, Walter H. (1)
Pres., Pitney-Bowes Postage Meter
Co.
Wheeler, R. A. (7)
International Nickel
White, Erskine (6)
Asst. to General Traffic Mgr., New
England Tel. & Tel.
White, Linford C. (1)
Pres., White Supply Co.
Whiteside, F. S. (1)
Pacific Mills
Whitney, H. LeRoy (3)
Dir., M. W. Kellogg Co., New
York City
Wickersham, Corwin (2)
V.P., Standard Brands, Inc.
Wiley, William C. (3)
Sales Engr., General Cable Co.
Williams, Albert (1)
Int'l Business Machines Corp.
Williams, Charles S. (1)
Chairman of Board, Thomas Edi-
son, Inc.
Williams, F. L. (1)
Williams Mfg. Co.
Wilson, Ralph (3)
Climax Molybdenum Co.
Winsor, Harrison (4)
Personnel Office, Puget Sound
Power & Light Co.
Wolf, Robert B. (4)
Meyerhauser Timber Co.
Woldsdorf, Henry A. (1)
Stapling Machine Co.
Wrisley, George A. (3)
Allen Wrisley Co.
Wyatt, A. Earl (4)
Personnel Dir., Laclede Securities
Co.
Yerkes, Arnold P. (1)
International Harvester
Zelmoek, A. W. (2)
Pres., International Statistical Bu-
reau, Inc.

TEMPORARY DOLLAR-A-YEAR PERSONNEL

Adelman, Isadore B. (1)
Theater owner
Alexander, Dr. Will W. (4)
V.P., Julius Rosenwald Fund
Arnold, Stanley H. (1)
Atlas Steel & Tube Co., Arnold
Motor Co.
Auten, James E. (6)
Barber Asphalt Corp.

Backstrand, Clifford J. (1)
V.P., Armstrong Cork Co.
Baker, Donald R. (3)
V.P., Asam Br., Inc.
Baker, John (3)
Philippine Refining Corp. of N. Y.
Barnes, John Stetson (1)
Chief engr. of manufactured foods,
Borden Co.

Barringer, Lawrence E. (3)
Chief Insulation Engr., General
Electric Co., 1 River Rd.,
Schenectady, N. Y.
Bennett, George R. (7)
George R. Bennett Co.
Bennett, Phillips (1)
Pres., Bird Machine Co.

Benson, Frank (3)
V.P., Hewitt Metals Corp.
Berry, Earl E. (1)
Engr., Beloit Iron Works.
Bickley, John H. (5)
Utilities Consultant
Birkelund, George R. (1)
V.P., Lyon Lumber Co.

- Bishop, James R. T. (1)
V.P., American Maize Products Co.
- Black, William Moore (1)
Member, Peat, Marwick, Mitchell & Co.
- Blackwell, Lawrence Franklin (1)
S.M., Pneumatic Scale Corp.
- Bland, Lee C. (1)
Pres., Eland Sls. Corp.
- Bonnot, Basil T. (6)
Pres., The Bonnot Co.
- Bowen, Tudor (2)
Merchandise Mgr., Stern Brothers
- Brewer, Willard O. (3)
Mgr., Bulk Sales, Calco Chemical Div., American Cyanamid
- Brown, Mark A. (1)
V.P., Harris Trust & Savings Bank
- Bucy, Edmund (3)
Technical Div., Atlas Powder Co.
- Bullitt, Orville H. (1)
W. H. Newbold's Son & Co.
- Burnside, D. D. (1)
General Supt., American Stove Co.
- Butler, Donald H. (7)
H. J. Heinz Co.
- Byrne, Cornelius James (5)
Merchandise Mgr., Mandel Bro.
- Cameron, Francis (3)
Carlson, Stanley A. (6)
Pres., Howe Machinery Co.
- Chenoweth, Laurence H. (1)
Mgr., Industrial Products Div., B. F. Goodrich
- Cherry, George H. (1)
Asst. S.M., American Bosch Corp.
- Chollar, Walter Edward (1)
V.P., Remington Rand
- Clapp, Elwood I. (3)
Chemical Engr., E. B. Badger & Son Co.
- Codling, Wilson C. (1)
Dir., Albany Packing Co.
- Collett, John Parrett (7)
Conklin, Rex G. (1)
Pres., Vulcan Lead Products Co.
- Copp, Ralph (1)
Pevely Dairy
- Creditor, Morse (8)
Asst. to Pres., W. Virginia Coal & Coke Corp.
- Criddle, Ray B. (6)
Ex-Cell-O Corp.
- Davis, H. W. (3)
Weirton Steel Co.
- Davis, Ralph E. (7)
Pres., Ralph E. Davis, Inc.
- Deboer, D. J. (3)
Chief Electrical Engr., Loop River Public Power District
- Devine, John F. (1)
S.M., Wornock Mills
- Dillingham, William O. (1)
Eastern Div., Best Foods, Inc.
- Doran, C. William (1)
Wheatena Corp.
- Doron, Jack E. (1)
V.P., Irwin B. Schwabe Co.
- Dowd, Hector J. (1)
V.P., Certain-teed Products Corp.
- Dowd, Ernest (7)
Pres., Mayflower Motors, Inc.
- Dyke, Nathaniel, Jr. (1)
Partner, Dyke & Co.
- Erbach, Frederick R. (1)
Vates American Machine Co.
- Ehrbar, Edward (1)
Pres., Edward Ehrbar, Inc.
- Ellis, Frank Joseph (1)
V.P., Wm. Wrigley, Jr. Co.
- Erikson, G. L. (3)
V.P., Braden Sutphin Ink Co.
- Etten, Nicholas L. (1)
Chamberlain Corp.
- Evans, Gordon M. (6)
Engineering consultant
- Evans, Thomas (1)
Pres., Merchant & Evans Co.
- Fair, Harry Heasley (1)
Affiliated with Caterpillar Tractor Co. and Soundview Pulp Co.
- Faust, Howard P. (7)
Pres. R. G. Wright Co.
- Fest, Francis P. (1)
Buyer, American Steel Export Co.
- Fish, Lounsbury S. (8)
Standard Oil Co. of Calif.
- Fitzpatrick, Edwin J. (1)
Harold H. Clapp, Inc.
- Fitzpatrick, William J. (2)
Buyer, R. H. Macy & Co.
- Flanagan, John J. (1)
V.P., Nat'l Manufacturing Corp.
- Floyd, T. W. (3)
Wilson & Bennett Mfg. Co.
- Footo, Richard Loring (3)
Synthane Corp.
- Forbes, James B. (6)
Dist. Mgr. of Alco Div., American Locomotive Co.
- Francis, Harry M. (3)
Asst. V.P., Rockefeller Bldg.
- Freedlander, A. L. (1)
Pres., Dayton Rubber Co.
- French, Herbert J. (3)
International Nickel Co.
- Fries, Vollmer Walter (7)
Asst. to Pres., White Horse Rental Div., White Motor Co.
- Frudden, Conrad E. (1)
Allis-Chalmers Mfg. Co.
- Funston, G. Keith (8)
Sales Planning Dir., Hygrade Syvania Corp.
- Gamble, David E. (6)
Berg & Beck Co.
- Garber, M. B. (1)
Asst. S.M. and Export Mgr., Thew Shovel Co.
- Gillespie, John, Jr. (6)
L. C. Gillespie & Sons, Asst. to Pres., Air Reduction Co.
- Gillis, Roger (1)
Goetz, Alvin C. (3)
Eagle Picher Lead Co.
- Gottsbarger, B. Britton (3)
Retired, formerly Mayflower Associates
- Greenbaum, Leon C. (7)
Pres., Metropolitan Distributors, Inc.
- Greenleaf, L. S., Jr. (1)
Behr-Manning Corp.
- Hass, Alvia (1)
Vates American Machine Co.
- Hager, Joseph Arthur (3)
Dir. of Sales Management, Grand Rapids Varnish Corp.
- Harker, Harvey M. (3)
Asst. G.M. of Sales, Organic Chemicals Div., Monsanto
- Harpor, William W. (1)
Salesman, Lamborn & Co.
- Harvey, Clarence Glen (1)
Staff Supervisor, American Tel. & Tel.
- Haskell, Everett E. (1)
Beatrice Creamery Co.
- Hatfield, Robert M., Jr. (3)
Sales Engr., Combustion Engineering Co.
- Haynesworth, Harry J., Jr. (1)
V.P., Burlington Mills Corp.
- Head, James L. (3)
Chile Exploration Co.
- Hebert, Robert Speir (3)
J. H. Bedding
- Hicks, Orton H. (2)
Chairman, Walter O. Gutlohn, Inc.
- Hipple, John Merton (1)
Asst. to Mgr., Merchandising Dept., Westinghouse Electric Co.
- Hochensmith, Frank E. (2)
Mid-West Bean Co.
- Hoffman, George E. (1)
Mgr., Plumbing & Heating Dept., Crane & Co.
- Hopper, Harold (1)
V.P., Darnour Corp.
- Horner, Col. Leonard S. (1)
Industrial advisor
- Howe, Francis W. (1)
Exec. V.P., Hubbs & Howe Co.
- Hubbel, John W. (1)
Simmonds Co.
- Huber, Hans W. (1)
Pres., J. M. Huber Corp.
- Hudgins, Holder (2)
Pres., Sloans Blabon Corp.
- Hunter, L. N. (1)
V.P., Nat. Air Conditioning, Inc.
- Hursh, Paul D. (1)
Glidden Co. and Durkee Famous Foods
- Husted, W. H. (3)
Asst. to Pres., Wickwire Spencer Steel Co.
- Israel, Adrian C. (1)
V.P., A. C. Israel Commodity Co.
- Jackson, Donald S. (7)
Peabody Engineering Corp.
- Jacobson, Julius (1)
Biberman Bros.
- Johnson, Wayne (8)
Dir., several companies
- Johnson, W. George (1)
Mgr., Petroleum Div., Crucible Steel Co. of America
- Jones, Clarence E. (1)
Chief Engr., Gen. Telephone Corp.
- Jones, Irving L. (1)
Pres., International Heater Co.
- Jordan, Donald L. (1)
Pres., Johnson Carper Furniture Co., Inc.
- Joralemon, Ira B. (3)
Consulting engr. and geologist
- Jur, Walter H. (1)
Consulting rubber technologist
- Kaddeland, C. R. (1)
Harris-Seybold Potter Co.
- Karpels, S. L. (3)
Imperial Paper & Color Corp.
- Keenan, George M. (3)
G.S., M. Power & Light Co.
- Kenny, Robert M. (3)
Ind. Mgr., Connecticut Light & Power Co.
- Kekick, Emil (3)
Sec.-Treas., American Match Mfg. Assoc.
- Kennedy, John A. (1)
President, Radio Station WSAZ
- King, Harry O. (3)
Pres., Munson Line, Inc.
- Kirkpatrick, Arnold (3)
Associate, Technical Service Dept., Monsanto Chemical Co.
- Krimmendahl, H. F. (1)
Crampton Canneries, Inc.
- Krook, Hilding Robert (5)
Pres., Robert Krook, Inc.
- Labrot, William H. (6)
Pres., Sussanah Creosoting Co.
- Lahey, R. W. (3)
American Cyanamid Co.
- Lambert, G. B. (8)
Dir., Lambert Co.
- Lautzenhiser, F. B. (1)
Chief Transportation Engr., International Harvester Co.
- Lehman, John R. (1)
Harris-Seybold-Potter Co.
- Leinbach, Frederick S. (1)
Research chemist and sales engr.
- Leslie, Donald S. (1)
V.P., Hammermill Paper Co.
- Lincoln, C. C. (1)
Pres., Virginia Lincoln Furniture Co.
- Lohmann, Frederick W. (1)
Goodyear Tire & Rubber Co.
- Longfield, Charles H. (3)
Gen. Mgr. of Sales, Youngstown Sheet & Tube
- Loper, Ralph E. (1)
Pres., Ralph E. Loper Co.
- Lubin, Joseph I. (1)
Eisner & Lubin
- Lucker, Frederick L. (??)
Chief Engr., Ingersoll Rand Co.
- MacNamara, Matthew J. (3)
V.P., Nat'l Distillers Prod. Corp.
- Maguire, John P. (10)
J. P. Maguire & Co.
- Mahrie, Kenneth (2)
National Can Corp.
- Marguis, V.M. (3)
Asst. Engr., American Gas & Electric Service Corp.
- Marriner, Kenneth W. (2)
G.M., Winslow Bros. & Smith
- Masland, Walter E. (3)
Masland Duralcather Co.
- Mayer, James D. (1)
V.P., Hanes Hosiery Mills Co.
- Maycott, C. W. (3)
Mgr. of Connecticut Valley Power Exchange
- McCargo, William Thomas (6)
Abrasive Engr., Carborundum Co.
- McCarthy, John T. (2)
Jersey Bread Co.
- McClintock, R. Otis (1)
First Nat'l Bank & Trust Co.
- McCullough, J. Bruce (1)
Avondale Mills
- McElwee, R. G. (3)
Mgr., Foundry Alloy Div., Vandalum Corp. of America
- Meschter, Wayne C. (1)
Advisor, American Preserve Co.
- Metzger, M. T. (3)
S.M., Bethlehem Steel
- Meyer, Arthur L. (3)
Dist. S. M., Great Lakes Steel Corp.
- Miller, Harry I. (11)
Wis. Pub. Service Corp.
- Millman, Thomas E. (3)
Agricultural chemicals, Cooperative Grange League, Federation Exchange
- Montague, Sidney A. (3)
Salesman, Asheville Mica Co.
- Moody, E. (4)
Hat Corp. of America
- Morrison, Jared Plummer (7)
Inspector Chief and Asst. Chief Engr., Hartford Steam Boiler Inspection & Insurance Co.
- Morehouse, Edward W. (3)
Trustee, Associated Gas & Electric Corp.
- Morse, Robert F. (5)
V.P., W. S. Libby Co.
- Mosses, John H. (3)
Artists' Representative Agent
- Moyer, Warren H. (3)
Chipman Chemical Co.
- Mudge, Arthur W. (3)
Organic Products, Inc.
- Mudge, Sterling W. (4)
Industrial and training relations advisor, Secony Vacuum Oil Co.
- Mula, Anthony A. (6)
Consultant, United Drill & Tool
- Murphy, William B. (1)
Campbell Soup Co.
- Neal, Kirke A. (3)
Investment Consultant, Loomis, Sayles & Co.
- Neely, Frank H. (1)
Officer and Dir., Rich's, Inc.
- Newcomer, Stanley J. (1)
V.P., Consolidated Paper Co.
- Nichols, Herman D. (7)
V.P., Tubbs Cordage Co.
- Nields, James (1)
Ware Knitters, Inc.
- Olson, Wilbur Keith (1)
Patent attorney
- Orr, Wilbur R. (2)
W. R. Orr & Co.
- Osmond, Charles H. (3)
Dir., Siosi Co.
- Ottinger, Lawrence (1)
Pres., U. S. Plywood Corp.
- Overlock, Joseph L. (1)
V.P., Continental Ill. Nat'l Bank & Trust Co.
- Owings, Jay W. (3)
Supt. Field Engineers, Youngstown Sheet & Tube Co.
- Pacini, Albert B. (1)
Cosmetics Production Mgr., Affiliated Products, Inc.
- Papert, S. W. (7)
Pres., Waskom-Bethany Oil Co.
- Parks, O. J. (1)
Gen. Supt. of Equipment, General American Transportation Corp.
- Parrish, William H. (1)
International Harvester Co.
- Patterson, J. H. (1)
V.P., F. N. Burt Co.
- Peirce, A. M. (1)
Leas & McVitty, Inc.
- Penn, Hamilton O. (1)
Proprietor, H. O. Penn Machinery Co.
- Peterson, G. A. (1)
Chief Engr., Rice Barton Corp.
- Plant, Marvin S. (3)
H. Klaff Co., Inc.
- Poindexter, Everton G. (1)
Dir., Techanny Milling Corp.
- Pond, Raymon A. (1)
Asst. Plant Mgr., Remington Rand
- Pope, Ralph L. (1)
Pres., Northwestern Leather Co.
- Ragan, Caldwell (1)
Pres., Ragan Spinning Co.
- Rapp, Walter E. (1)
Consulting engineer
- Rector, Thomas M. (5)
Mgr., Central Laboratories, General Food Corp.
- Reed, Gordon W. (3)
Pres., Texas Gulf Producing Co.
- Reese, Donald James (3)
Foundry Metallurgical Engr., International Nickel Co.
- Reid, Lewis S. (7)
Metropolitan Life
- Rheinstrom, Carroll (1)
Wark Wheelock Co.
- Robbins, William M. (1)
V.P., General Foods Corp.
- Roberts, Eugene A. (1)
Mgr., Airplane & Passenger Div., Firestone Tire & Rubber Co.
- Rogers, Harry S. (1)
Pres., Polytechnic Inst., Brooklyn.
- Rose, Henry (1)
Pres., Henry Rose Store, Inc.
- Rosenberger, William (2)
First National Stores
- Ross, Bryant C. (3)
Chemical Salesman, R. T. Vanderbilt Co.
- Rowe, Hartley (6)
V.P., United Fruit Co.
- Rust, Philip G. (7)
Laird & Co.
- Schrier, Arthur C. (1)
Asst. to Sec. and Treas., E. J. Brach & Sons
- Scull, R. Barclay (1)
V.P., W. S. Scull Co.; Sec., Board of America, Inc.
- Sentner, Richard F. (3)
Mgr., Tin Plate Sales Div., Wheeling Steel Corp.
- Setter, Clifford P. (1)
Pres., Setter Bros., Inc.
- Shafter, A. F. (1)
Treas., U. S. Mfg. Corp.
- Shaw, Milton M. (1)
Pres., N. Y. Merchandise Co.
- Shepard, Robert B. (7)
Chief Electrical Engr., Underwriters Laboratories
- Shive, Roy A. (3)
Calco Chemical Div., American Cyanamid
- Simons, Langdon S. (3)
Sec., Steel Export Assn. of America
- Singer, William A. (3)
Pres., Apex Smelting Co. of Chicago
- Slick, Thomas B. (3)
Owner, Essar Ranch
- Smellie, D. G. (1)
Chief Engr., The Hoover Co.
- Smith, Arnold Harry (3)
Asst. S. M., Monsanto
- Solinsky, Robert Sam (1)
Pres., Cans, Inc.
- Southwick, Charles A., Jr. (2)
Asst. to V.P., General Foods Corp.
- Spalding, Samuel C. (3)
Metallurgical Engr., American Brass Co.
- Stanley, A. E. Jr. (1)
A. E. Stanley Mfg. Co.
- Stanley, Morris B. (3)
Development Div., Victor Chemical Works
- Stark, W. E. (1)
Bryant Heater Co.

Stock, Frank William (7)
Nustone Products Corp.
Strait, Edward N. (5)
Public Utility Engr. & Service Corp.
Strouse, Hal H. (6)
Sales and Service Engr., Steel & Tube Div., Timken Roller Bearing Co.
Talbot, Harold E. (6)
Chairman of Board, Pardners Mines Corp.; other corporations
Taylor, Rees H. (3)
Pres., Union Oil Co.
Thayer, Floyd K. (1)
Abbott Laboratories
Thomas, John F. (8)
V.P., Nat'l Enameling & Stamping

Thomas, Lowell S. (7)
Pres., General Smelting Co.
Torrence, George P. (1)
V.P., Rayon Machinery Corp.
Turran, Walter W. (1)
N. Y. Telephone Co.
Turnbull, J. Randolph (3)
Dir. of Advertising and Sales Promotion, Monsanto Chemical Co.
Van Cleve, Ben Muirheid (3)
Sherwin-Williams Co.
Van Raalte, Arthur (1)
Member, N. Y. Stock Exchange
Vogelback, William E. (6)
Pres., American Engineering and Management Co.
Vosmer, William F. (3)
Republic Steel Corp.

Wakeman, A. G. (1)
Fox River Paper Corp.
Waldschmidt, Edward K. (3)
Sales Dept., Jones & Laughlin
Weaver, Elmer Henry (7)
Asst. Mgr. of Purchases, Union Oil Co. of Calif.
Weisbrodt, Hugo A. (1)
Plant Supt., Int'l Harvester Co.
Wertheim, Maurice (5)
Senior Partner, Wertheim & Co.
Whitaker, Howard E. (1)
Mead Corp.
Wiebel, Arthur V. (3)
Asst. to V.P., U. S. Steel Corp. of Delaware

Wiesel, J. B. (3)
Dir., Sales and Development, Celulose Products Dept., Hercules Powder Co.
Wilcox, Ralph Lee (7)
Sales Dept., W. J. Zinc Sales Co.
Willems, Wm. Rudolph (7)
Titanium Div., National Lead Co.
Withrow, John M. (1)
Kendall Co.
Yeaton, Leander C. (1)
V.P., A. H. Du Grenier, Inc.
Young, Thomas (8)
Advertising Sales Promotion Div., U. S. Rubber Co.
Youngren, William (1)
Buyer, Montgomery Ward
Zoll, Arthur F. (3)
National Tube Co.

"WITHOUT COMPENSATION" PERSONNEL

Adams, Charles E. (3)
Chairman, Air Reduction Co.
Anderson, Wallace E. (6)
Asst. to Sales Dir., Brown & Sharpe Mfg. Co.
Angus, Donald J. (1)
Pres., Esterline-Angus Co.
Aspley, John C. (4)
Pres., Dartnell Corp.
Bailey, Walter K. (6)
S.M., Warner & Swasey
Ball, John M. (5)
Editor, technical magazine, R. T. Vanderbilt Co.
Ballard, Dean D. (4)
Mgr., Labor Relations District, Seattle C. of C.
Barclay, John P. (3)
Pres., New Haven Sand Blast Co.
Barkin, Solomon (4)
Dir. of Research, Textile Workers Union
Bennet, Fred A. (6)
Sales Engr., Marshall & Huschart Machinery Co.
Biery, Hudson (4)
Dir. of Public Relations, Street Railway Co.
Brooks, Edward Pennell (1)
V.P., Sears-Roebuck
Brophy, John (4)
Dir., Industrial Union Councils, C.I.O.
Bugbee, Cornell (1)
Mgr., Crude Rubber Div., B. F. Goodrich
Bullard, John A. (6)
Dept. Head, Bullard Co.
Bulova, Arde (8)
Chairman of the Board, Bulova Watch Co.
Burger, John D. (8)
Pres., Lohr Laboratories
Burton, Carroll (5)
V.P., Carnegie-Illinois
Carter, Robert M. (6)
H. A. Smith Machinery Co.
Cetner, Joseph (4)
United Electrical, Radio & Machine Workers of America
Chapman, Frederick L. (6)
S.M., Gisholt Machine Co.
Chesnutt, Samuel (1)
Editor and publisher, The Kennedy Advance, Kennedy, Tex.
Clark, J. H. (1)
In Charge, Packing Div., Purchasing Dept., Swift & Co.
Climmer, Fred W. (4)
Dir. of Personnel, Goodyear
Cooper, K. Conrad (4)
Wheeling Steel Corp.
Croy, Leo Edward (1)
V.P., Marathon Paper Mills
Cunning, Howard R. (1)
Div. Sales Mgr., Link Belt Co.
Daum, John H. (6)
Asst. V.P. and G.M., Cincinnati Planer Co.
Davidson, J. Brownlee (5)
Head of Agricultural Engineering, Iowa State College
Davidson, Morris, M. (4)
Rutgers University
Davies, George A., Jr. (6)
G.M., Eccles & Davies Machinery Co.
Dawson, Herbert D. (4)
Field Rep., United Rubber Workers of America
De Graff, Wilbur G. (6)
S.M., Warner & Swasey Co.
De Witt, W. M. (4)
Exec. Sec., South Bend Citizens, Inc.
Dickerson, Earl (4)
Alderman, Chicago Legislature
Drissner, Alfred E. (6)
V.P., National Acme Co.
Durbin, William O. (1)
E. I. du Pont de Nemours
Dyson, W. S. (6)
Owner, Hallidie Machine Co.
Edmunds, W. P. (4)
Standard Oil Co. of Ohio

Ethridge, Mark F. (4)
Louisville Courier Journal
Everett, Harvey L. (1)
V.P., Everett Distributing Co.
Falk, Akrien J. (4)
S. & W. Fine Foods, Inc.
Fenton, Frank (4)
Dir. of Organization, A.F.L.
Fisher, Frederick (6)
Pres., R. E. Ellis Engineering Co.
Fitzgerald, John B. (4)
Legislative Agent, Cleveland Federation of Labor
Franz, C. G. (6)
Cleveland Twist Drill Co.
Fritze, J. Ralph (7)
Materials Engr., Edison General Electric Appliance Co.
Fuller, Roscoe Hodges (6)
Supervisor of Western Dealers, Heald Machine Co.
Gaudin, Antoine M. (3)
Richards Professor of Mineral Dressing at Mass. Institute of Technology
Germain, James D. (6)
Mgr., Los Angeles Office, Moore Machinery Co.
Graham, Walter O. (6)
Sales Engr., Henry Prentiss & Co.
Green, William (4)
Pres., A. F. of L.
Griffith, Franklin T. (4)
Pres., Portland Electric Power Co.
Grumm, Fred (1)
Engr., PWA, State of Calif. Division of Highways
Habicht, George, Jr. (6)
Pres., Marshall & Huschart Machinery Co.
Hall, Cortice H. (1)
Chief Engr., Fairbanks, Morse
Harding, H. N. (6)
North Co.
Harrower, George M. (6)
V.P., Brown & Zortman Machinery Co.
Hauser, George D. (1)
Pres., Utica Products, Inc.
Hay, Edward N. (9)
Personnel Dir., Pennsylvania Co.
Hayden, Joseph H. (1)
Sec., Hewitt Rubber Corp.
Hebert, James C. (6)
S.M., Jones & Lamson
Herkner, George W. (6)
S.M., Warner & Swasey
Hillman, Sidney (4)
Pres., Amalgamated Workers of America
Hinton, E. R. (4)
Olympic Steel Co.
Hoagland, Frank O. (6)
Master Mechanic, Pratt & Whitney
Hoffman, J. R. (6)
V.P., Smith Booth Usher Co.
Holcombe, Arthur N. (8)
Professor of Government, Harvard
Hollister, Benjamin (1)
Buyer, Montgomery Ward
Hultman, Ivar N. (3)
Supt., Eastman Kodak Co.
Hunt, Omar S. (6)
Marshall & Huschart
Hutton, Frank E. (3)
Sales Engr., Babcock & Wilcox
Irwin, R. Randall (4)
Industrial Relations Dir., Lockheed-Vega
Jewell, Howard William (1)
Chief Engr., Pacific Clay Products
Jones, Thomas R. (4)
American Type Founders
Junkins, Raymond D. (1)
Bailey Meter Co.
Kieffer, Dale C. (3)
Treas., American Potash Institute
Kimberley, John Lester (7)
Scoville Mfg. Co.
Kinkhead, Robert E. (1)
General consulting engr.
Kitt, Howard G. (3)
Foster Wheeler Corp.
Lane, Joseph B. (6)
Sales Engr., Greenfield Tap & Die

Lange, M. E. (6)
Senior Design Engr., Warner & Swasey Co.
Larson, Laurence K. (1)
S.M., Weyerhaeuser Timber Co.
Latham, William G. (1)
Pres., Fort Orange Paper Co.
Lentzner, Henry H. (6)
S.M. Kearney & Trecker Corp.
Lewishon, Sam A. (1)
Miami Copper Co.
Logan, Alan A. (3)
V.P., Peale, Peacock & Kerr
Long, Freas Moore (6)
Gisholt Machinery Co.
Lord, Henry S. (4)
V.P., French & Hecht
Lowell, Floyd C. (6)
Remington Typewriter Co.
Luke, David L., Jr. (1)
V.P., West Virginia Pulp & Paper
Luther, Martin J. (6)
Sales Engr., Warner-Swasey Co.
Lutz, Arthur W. (4)
Smart & Final Co.
Lynn, William H. (3)
Export S.M., Wickwire Spencer
Macconell, D. N. (6)
Pres., Machinery Sales Co.
Maclean, Malcolm S. (4)
Pres., Hampton Institute
Malby, Seth G. (3)
Production Mgr., Aluminum Co. of America
Marshall, W. G. (4)
V.P., Westinghouse E. & M. Co.
Martin, Harold T. (4)
Industrial relations advisor
Matthews, Donald M. (1)
Professor of Forestry, Michigan U.
McBreen, G. L. (3)
Supt. of Orders, Republic Steel
McMahon, Thomas A. (1)
Mgr. of Priorities, J. D. Adams Mfg. Co.
Meek, George W. (1)
Asst. Dir. of Development, Carrier Corp.
Melton, Earl (4)
V.P., Int'l Assn. of Machinists
Metcalfe, John B. (3)
Geologist, U. S. Smelting, Refining & Mining Co.
Miller, Floyd Roscoe (4)
Frigidaire Div., General Motors
Mills, Ellsworth L. (1)
V.P., Bastian-Blessing Co.
Milmoe, James B. (3)
Mgr. Sales and Service, Southern Natural Gas Co.
Milton, Joseph (4)
Victor Talking Machine Co.
Mollers, John A. (4)
Supervisor of Field Training, New York Telephone Co.
Monroe, Andrew P. (4)
V.P., New Jersey Bell Telephone
Monteath, Edward (1)
McLundie Co.
Muend, Charles J. (1)
Mgr., Hajo Brass Works
Mulvihill, John L. (1)
Radio dispatcher, N. Y. City
Murray, Philip (4)
Pres., C.I.O.
Murray, Rex C. (4)
United Rubber Workers of America
Neville, S. F. (3)
Asst. Mgr., Westinghouse Electric Co.
Oatis, H. E. (6)
Oatis-Booth Machinery Co.
Perry, Raymond S. (6)
V.P., Milling Machine Co.
Porter, Oliver M. (1)
Exec. Dir., U. S. Pulp Producers Association, New York
Preston, George F. (6)
Sec. and Treas., Henes-Morgan Machinery Co.
Purucker, R. E. (3)
Public Service Commission of Wisconsin

Ratliff, Stanley M. (6)
Sales Engr., The American Tools Work Co.
Ray, George R. (6)
V.P., Marshall & Huschart Machine Co.
Raycroft, Louis B. (4)
Mgr., Public and Industrial Relations, Electric Storage Battery
Reid, James F., Sr. (3)
Prod. Mgr., Timken Roller Bearing
Rennix, Victor E. (1)
Baldwin Locomotive Co.
Ridley, Clarence E. (1)
Exec. Sec., Int'l City Manager Assoc.
Riley, Dave L. (6)
Asst. to V.P., Aviation Div., Studebaker Corp.
Riordan, John M. (6)
Founder, Riordan Machine Co.
Rousseau, Henry H. (1)
V.P., Grocery Store Products Co.
Sarnoff, David (4)
Pres., Radio Corp. of America
Sauer, John, Jr. (6)
Peninsular Machinery Co.
Schafer, Paul J., Jr. (6)
Engr., Harrow, Reckard & McCone
Schier, Arthur C. (1)
Gen. Traffic Mgr., General Foods Corp.
Scott, Frederick B. (6)
Syracuse Supply Co.
Sharp, Harold S. (1)
S. M. and V.P., Henry Furnace & Foundry Co.
Shimmin, Robert P. (1)
Retired, formerly Link Belt Co.
Sinclair, Archer E. (4)
Personnel Dir., P. R. Mallory
Smith, T. Stanley (6)
S.M., Machinery Sales Co.
Smith, Walter M. (6)
Sales Engr., Bryant Chucking Grinder Co.
Southall, Sara (4)
Personnel Dir., Int'l Harvester Co.
Stevens, Raymond (1)
V.P., Arthur D. Little, Inc.
Sweeney, W. O. (3)
Welding Engr., Haynes Stellite Co.
Taffe, Griffin C. (C.)
Production Engr., American Milling Machine Co.
Tabler, W. A. (6)
Engr., National Twist Drill & Tool
Tall, George W. (1)
Mgr., Industrial Div., Leeds & Northrup Co.
Tasley, James E. (5)
Pres., Consumers Import Co.
Todd, Alexander, Jr. (6)
G.M., Harrow, Reckard & McCone
Toney, George R. (1)
Owner, Latex Rubber Co.
Tragard, John O. (1)
Chairman, Industrial Committee for Process Control Equipment Manufacturers
Updegraff, Robert R. (1)
Dir., Jewel Teal Co.; W. T. Grant
Wall, Richard A. (1)
Supt. of Industries, Indiana Penal Institution
Wasker, Harry A. (6)
Pres., Plastics Finishing Corp.
Waring, J. M. S., Col. (11)
Professor, Economics and Social Sciences, Fordham U.
Webster, Milton P. (6)
Int'l V. P., Brotherhood of Sleeping Car Porters
Weindling, Ludwig (11)
Pres., Weindling Co.
Weisinger, Kendall (4)
Southern Bell Tel. & Tel.
Weissinger, T. E. (4)
Training Supervisor, Remington Arms Co.
Wolman, Abel (3)
Professor, John Hopkins U.



... every 15 hours for 111 years

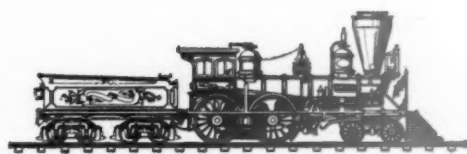
If you've ever stood dwarfed beside a modern locomotive, you may have had a fleeting realization of how complicated a job it is to build even one such mammoth power plant and make it work on wheels at a mile a minute or more.

But Baldwin, throughout 111 years of service to the railroads, has built more than 64,000 locomotives—an average of one locomotive every 15 hours for this entire period.

Baldwin has built as many as 3,580 locomotives in a single year—once shipped a group of 20 locomotives in a solid train—once started from scratch and built six locomotives in seventeen days. And all the time Baldwin was developing, in conjunction with the railroads, improvements in locomotives, fitting them to new and changing needs.

While Baldwin has been closely associated with the development of America's railroads, it also has done spectacular things in many other widely separated fields. Hydraulic machinery, power dam turbines, ship propellers, diesel engines—all are products of Baldwin.

Today, Baldwin is using this varied experience in the manufacture of Army tanks, guns, gun mounts, ship parts and other priceless war materials.



A limited number of full-color lithographs, 14" x 19", of the *Tiger*, famous Baldwin locomotive of 1856, are available upon request. Write for your copy to Department 900, The Baldwin Group, Paschall P. O., Philadelphia, Pa.



BALDWIN

The Baldwin Locomotive Works, Philadelphia, Pennsylvania; Locomotive & Ordnance Division; Baldwin Southwark Division; Cramp Brass & Iron Foundries Division; Standard Steel Works Division; Baldwin De La Vergne Sales Corp.; The Whitcomb Locomotive Co.; The Pelton Water Wheel Co.; The Midvale Co.

Baldwin serves the Nation which the Railroads helped to build

PRODUCTION

Packing for War

Engines, plane parts, and tanks require special packaging for shipment—especially export. New techniques are many.

Under stress of war, crating and packing is moving with rapid strides toward a perfection previously unknown. Lessons are being taught by the necessity for trouble-free and speedier delivery of goods, and the automobile industry has developed new materials-handling devices and processes which appear to have significant postwar applications. Thus far, two broad systems have been brought to advanced stages.

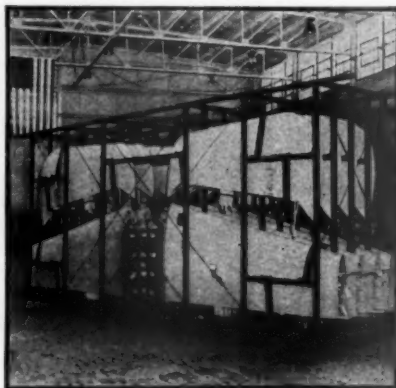
• **The Aims Involved**—One such system involves handling of such products as aircraft engines and tanks, which must arrive at destination ready for instant installation or use, sometimes after long periods of idleness in transit. The objective in such packing is to eliminate any vestige of moisture which could impair functional parts.

The other system involves movement of knock-down parts from subcontractor to prime contractor. Here the objectives are the conservation of crating and uncrating time, and the most efficient and economical utilization of shipping space. Until now the developments in this field have been confined mainly to aircraft fuselage and wing parts, but automotive sources hear that one company is con-

templating entering the field with the technique adapted to many types of assemblies.

• **Precision Crating**—The care necessitated to protect against moisture in overseas—and sometimes domestic—shipments is well illustrated in aircraft engine and tank plant practice.

The two-piece hardwood boxes which shield Packard-built aircraft motors are trim, but they hardly hint at the meticulous care given their contents. Engine valve mechanisms and cylinders are first sprayed with a special, rust-preventive compound. All openings are sealed, and fittings are safely wired and locked. Dehydrating plugs, similar to silica gel (a moisture-absorbing compound) are inserted in the engine, and the entire unit is then sprayed and sealed.



Returnable racks for interplant shipments of aircraft parts have speeded loading and unloading, saved shipping space for G.M.'s Fisher Body Division.

• **How Engines Are Handled**—A two-piece case produced by outside sources awaits each engine. A plioilm bag is spread in the lower half. About 10 lb. of silica gel is applied, and a chain drop lowers the engine gently onto the plioilm in the "cradle."

A "tell-tale" moisture indicator is hung at a point where it will be readable through an aperture of the crate. A combination canvas and rubberized top, to protect sharp edges and corners, is spread over the engine, and then the plioilm bag is drawn up, air is drawn off as completely as possible, and the bag is hot-sealed.

• **Kitchen Device Used**—Shippers operating spreader guns, similar to those used by fancy pastry cooks, then lay ribbons of sealing compound around the lip of the lower half of the case.

During shipment a regular watch is kept on the aperture through which the "tell tale" can be scanned. If it begins



Vulnerable moving parts of Chrysler-built tanks are protected with silica gel, paraffin wax, and heavy grease.

to turn from blue to pink, it establishes the presence of moisture, and the crate is immediately opened and rehandled. But this seldom happens. Shipping of "fine watches by the pound," as Packard men like to characterize their manufacture, must always be near-perfect.

• **Well Padded Tanks**—Tanks are also prepared most carefully for export shipment. Vulnerable moving parts are specially greased and sealed at tank arsenals before going to loading docks. Paraffin wax, silica gel and heavy grease are employed. The tank bottom is also sprayed with wax, to reduce moisture potential. Tape, some of it 14 inches wide, is strapped on as further protection over these well-sprayed surfaces.

Such practices mark important improvements over previous handling methods. Automobiles marked for export have always been carefully safeguarded when sent abroad assembled, but the extent of care for the motors was not so zealous. Conceivably, the silica gel means of moisture absorption might be incorporated in all variety of precision machinery shipments over water routes as well as in motive power units.

• **Sheet Metal Trend**—Of different aspect is a marked change in crating theory on sheet metal parts, exemplified in aircraft component shipments. Fisher Body Division has been a leader in this transition, adapting principles of mass-packing automotive body parts to the shipment of bomber sections.

Plane sections were formerly shipped in wood crates. Fisher's method is to utilize steel frames which serve as containers. Within these frames the parts in transit are held by strong but elastic straps which tend to absorb impacts. The frames themselves roll on rubber-mounted "knee action" casters. They fit



In weatherproof wrappers, Packard-built Rolls-Royce aircraft engines are ready for crating and shipment.

into freight cars specially equipped with rails and clamps for foolproof fastening during the trip.

• **Many Advantages**—The use of the steel frames makes possible the loading of more sections of bomber parts than would be possible in cover-all wooden crates requiring equal space. Speed of loading and unloading is considerably amplified. More important, packing material is reduced from about twice the weight of the goods to 1.5 times. In as much as the containers are used over and over again, there is no dunnage waste.

Initial cost of such frames, naturally, is considerably higher than for wooden crates. But, by reuse, amortized cost is cut sharply.

• **Other Possibilities**—Adaptation of such a system are applicable to a wide variety of bulky goods wherein weight is not too concentrated. A somewhat similar use of frames is being studied in connection with highway truck-trailers.

Interesting, too, in the war history of packing progress, is the handling of military knocked-down trucks shipped abroad. One company, a large exporter of such vehicles, has augmented its disassembly more than ever before, with the result that a truck formerly requiring 800 cubic feet of space for its crate is now handled in 300 cubic feet. In the case of another shipper, the trucks are crated in pairs, with the stacking of such sections as sheet metal parts achieving noteworthy space economy.

• **Promise for Future**—Such developments promise to blaze trails for many lines of civilian goods after the war has ended.

Gliders' Chance

War transportation pinch induces Army to give air cargo tows the full-scale test long urged by motorless-flight fans.

The Army has made a hairpin turn in its glider policy, and the reason is air cargo. A few months back, Air Force officers told congressional committees that powerless flight was not very important in this country's strategy.

• **Shipping Pinch Felt**—The shipping shortage got worse and Army announced its determination to take part of the load in airplanes. (This seemed a bit tardy, as Germany had provided freight planes in the ratio of one to each bomber.) The Army has ordered and programed thousands of cargo planes. Now it is ordering thousands of cargo gliders, and a big glider training program is under way for training of pilots.

A given aircraft-engine horsepower will haul far more load in towed gliders than it will haul in one powered plane. Reliable engineers claim a ratio of four-



TUBE SALVAGE

Badly damaged or worn out automobile tubes which would ordinarily be scrapped are now being rebuilt into serviceable tubes by a special process developed by Firestone Tire & Rubber Co. Torn or worn out sections are cut out and discarded, and the remaining good sections, after being sorted according to size are matched up (above) and welded end-to-end by a special vulcanizing process (right). Thus the car of a war worker may be kept rolling by the aid of an "assembled" tube made up from as many as four hopelessly damaged tubes.



to-one is not extravagant. In other words, if a DC-3 carries 6,000 lb. of freight, a similar plane and three towed gliders would carry 24,000 lb. Motorless-flight men have harped this proposition into deaf ears for years until now the war load problem forces it to trial.

• **For Use by Troops**—While cargo is the issue, combat troops can use the same type of glider. Talk is heard of big jobs (gliders use nearly all nonstrategic materials: mild steel, wood) with a wingspan just short of the Boeing B-17 bomber and capable of carrying the load of a large two-engined commercial plane. Such a craft would have room for several squads of troops and all the trappings of war.

Many gliders have ski-like skids as well as wheels and they can be nosed over on these and stopped in almost any field or on a bomb-pocked airport. Cut loose at 10,000 feet, they can coast to any point within 12 to 25 miles, depending on load, and silently.

• **Pickup Device**—Both Wright Field and All-American Aviation (Dick du Pont's airmail pickup system) have perfected a device for two planes to grab gliders off the ground without landing, thus speeding traffic. A trailing gripper catches the glider's line, which is laid

across two "goal posts." Then a reel in the tow plane pays out line as a brake gradually stops the reel.

Next thing—possibly not till after the war—will be a "locomotive" plane. Meanwhile regular cargo planes, themselves loaded, are being used as tow planes. The "locomotive" will be all engines with just enough wing to float it.

Experts say glider trains cannot yet cross oceans; they are slow, and must follow fuel trails. But they can range the United States, the Caribbean, South America, and might reach Russia via Alaska.

Postwar glider cargo is being whooped up with as yet no rebuttal. What problems may arise no one can say. For passengers it sounds like a dream: no noise, no vibration.

• **Training program**—The glider pilot that is under way is partly being conducted through the Civil Aeronautics Administration's civil pilot training program. Recruiting has been found rather difficult, both because of a lack of glamor and because of a suspicion that gliding troops is a suicide job. Such notions, officials hope, will be dispelled as use of gliders becomes more prevalent and their importance becomes more apparent to aviation authorities.

What are YOUR Plans for

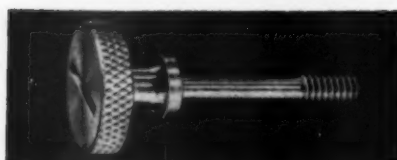


*AFTER VICTORY

Our first, biggest, most vital job is to win this war.

Nothing must stand in the way of our producing for ultimate victory. However, in the midst of this all-out surge of war production, we believe it is wise and sound to look ahead... to plan now for the problems that will arise when this crisis is over. Thus, with no let-up in our victory production drive, we are planning ahead for post-war times. We will be happy to discuss this all-important phase with anyone so interested, and thus coordinate our respective efforts for the future.

(Below) Close tolerance, stainless steel parts like this help "Keep 'em flying."



ERICSSON

SCREW MACHINE PRODUCTS CO., INC.

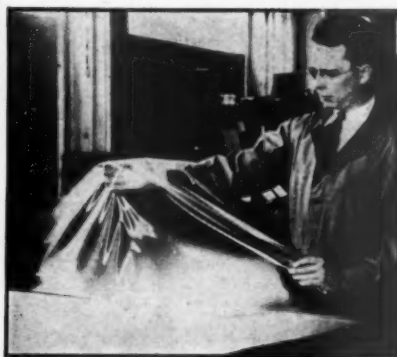
25 LAFAYETTE STREET, BROOKLYN, N. Y.

Copyright 1942, Ericsson Screw Machine Products Co., Inc.

NEW PRODUCTS

Transparent Stripping Lacquer

When the highly polished surfaces of metal or ceramics are handled between manufacture and shipment, they are all too likely to be blemished by surface scratches, finger marks, grease, etc., and far too frequently returned for refinishing.



ing or sent to the scrap heap. To protect both smooth and irregular surfaces, Ault & Wiborg Corp., 75 Varick St., New York, is formulating Protektol, a new temporary plastic-base, stripping lacquer, which may be applied by spray, brush, dip, or roller.

After drying a few minutes, the material forms a tough, adherent film so completely transparent that it permits instant visual inspection of the article covered, in fact hardly appears to be there. To remove it, scratch through a convenient spot and peel. The peelings may be re-dissolved to liquid form and re-used again and again.

Paper Sand Bags

Special bags holding 40-45 lb. of dry sand are new products of Chase Bag Co., Chicago. Drop one unopened upon a burning incendiary bomb. It is designed to break open, permitting the sand to pour out and over the fire.

Electronic Moisture Detector

Many precision steel parts for guns, planes, tanks, and other material must be hardened by heat in a special airless gas atmosphere, such as hydrogen, so that their highly finished surfaces will not be scaled or rusted. Because the presence of only a little water vapor in the gas would result in rust, heat treaters customarily spend a good deal of time in moisture determinations.

Now, however, he can do such a job instantaneously with the Westinghouse Electronic Moisture Detector, new development of Westinghouse Electric & Mfg. Co., East Pittsburgh. The business part is a two-element tube similar to

a radio rectifier, but with an inlet and an outlet through which gas is passed on its way to the furnace. As long as dry gas passes through, electrons flow steadily from the tube's hot filament to the plate, producing an unvarying electric current. When water vapor is present, some of the electrons attach themselves to the water's oxygen atoms, reducing the current. Such current fluctuations can be read in terms of moisture from a simple meter or recorded on a more elaborate recording device. Incidentally the same method may also be used in detecting and measuring impurities in certain other industrial gases.

Industrial X-Ray Films

Superay "A" and Superay "B" are two new films now being brought out by Agfa Ansco, Binghamton, N. Y., for the nondestructive radiographic inspection of castings, weldings, forgings, etc., with radium or x-ray. Both have extremely fine grain and "contrast" to enable them to reveal minute cracks, voids, bits of foreign matter, and other defects that have formerly eluded detection. The B film is slightly slower than the A, but catches more inside detail of the material under inspection.

General Utility Lantern

The battery-powered new FocOLite Lantern for night watchmen, service



men, car inspectors, and campers is equipped with two distinct light sources: a main "bullseye" with adjustable focal length for searchlight or floodlight beams, and a smaller, guarded, utility bulb on an extension cord secreted in the handle. Focal Co., Downey, Calif., manufactures the device almost entirely out of Tenite plastic moldings for strength, lightness, and the conservation of critical metal.

MARKETING

Night Openings

Retailers' concession to the needs of workers in round-the-clock industrial centers grows into a full-fledged trend.

When a group of New York City's upper crust Fifth Avenue specialty shops and department stores stayed open until 9 p.m. on Thursday of last week, it began to look as though the trend toward night openings might develop into a stampede.

• **Formerly the Exception**—Up to a couple of years ago, night openings were the exception. In only two large cities—New York and Philadelphia—did a significant number of department stores stay open one night a week. Even there, openings were confined to big-volume, medium-priced stores with a heavy proportion of business in home furnishing and appliance departments—stores like Gimbel Bros., R. H. Macy, and Wanamaker's. High-priced specialty shops figured the night hours wouldn't bring in enough extra business to make the move worthwhile.

The defense boom gave the impetus to night openings. Stores in cities where war plants were going round the clock adjusted their hours to three shift operations. In a survey last April of 250 large department and specialty stores across the country, the School of Retailing of New York University found that—out of 100 answering the questionnaire—23 had changed opening and closing hours as a result of the war.

• **On a General Scale**—Night openings have been inaugurated on a general scale in Baltimore, Buffalo, Dayton, Cleveland, Akron, and Washington, D. C. Boston cannot be classified as a war town, but its specialty shops—feeling the pinch of suburban competition—recently agreed to stay open one night a week. Contrary to the usual trend, the big department stores in Boston did not take the lead in adopting night openings, and have not yet fallen in line.

New York, also, is not strictly a war town, but the Fifth Avenue specialty shops which inaugurated night openings there last week say that they did so in order to give women volunteer war workers and busy executives more convenient shopping hours. Department store competition may also have had something to do with the move.

• **Outside Pressure**—In many cases, the retailers have not been the ones who took the initiative. Sometimes the move has been requested by factories on three-shift schedules, sometimes by commit-



An Employers Mutual Safety Poster *

VICTORY IN '43

Victory must be preceded by production. What we accomplish in '43 depends on what we do in the next few months of 1942. The nation is conscious of the need for production. Our fighting forces anticipate no delays in the delivery of equipment with which to combat our enemies.

Preserve industrial manpower! Safe practices in every operation in your plant will do it. Employers Mutual safety engineers know the safe ways of doing things. Our policyholders agree! Can you use this service in your plant? Ask for our proposal.

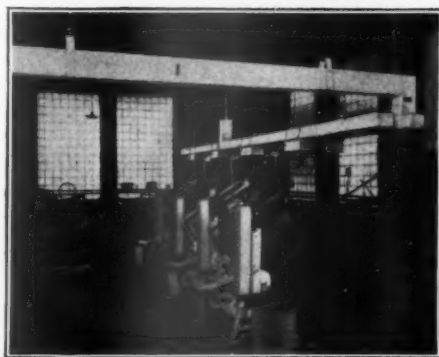
*Send for a copy

Employers Mutual

LIABILITY INSURANCE COMPANY OF WISCONSIN

HOME OFFICE: WAUSAU, WISCONSIN

OFFICES IN THE PRINCIPAL CITIES OF THE UNITED STATES



At left: A dual installation of 125 Amp., "JUNIOR" Type [Ⓐ] Busduct in this plating room supplies low voltage direct current to electrodes, and alternating current to motors driving the tumbler. [Ⓑ] SHUTLBRAK (Operating Type) Plug-in Devices are used for controls.



BUSDUCT helps save rubber

In remodeling or expanding the electrical distribution systems of large, small and medium sized plants, [Ⓐ] Busduct, which contains no rubber, fits perfectly into the picture... It saves production hours; machines may be moved to any desired position, plugged in quickly, and operation started with minimum loss of time... Installation cost is low—salvage value high... Designed for 2, 3 and 4 wire feeder systems; 250 volt DC, 575 volt AC, maximum. Plug-in type capacities, 125 to 1,000 Amps. Feeder type, 250 Amps. and up... Write for illustrated Bulletin 65, which shows the application of this flexible, economical and efficient system to your distribution problems.





You know it's O.K. when they cross rivers with wood

WOOD TOWERS are carrying power lines across rivers, supplying electricity to plants making vital war products. Wood releases steel for munitions and fighting equipment. Wood goes up quickly, yet has the high strength and the light weight required for "high line" towers.

WOLMANIZED LUMBER*—wood that is vacuum-pressure impregnated to make it resistant to decay and termite attack—assures long life for these structures. Service records on millions of feet of Wolmanized Lumber, some of it in use for more than fifteen years, are evidence of its lasting ability.

WARTIME CONSTRUCTION employing Wolmanized Lumber shows how engineers are looking to the future. They are meeting the demands for speed, but they're also making certain that maintenance costs will be low when these structures are switched to peacetime service.

WHEN YOU ARE ABLE to resume peacetime construction, think of Wolmanized Lumber as a means of defeating decay and termite attack. We'll gladly send you information on its use. Write American Lumber & Treating Company, 1656 McCormick Bldg., Chicago, Ill.

*Registered Trade Mark

**WOLMANIZED
LUMBER**



tees of workers, sometimes (as in Norfolk, Va.) by the Army or Navy (BW—Jun6'42,p22).

Where retailers have been reluctant to open at night, labor has been an important consideration. A weekly open night has generally meant a twelve-hour stretch—9 to 9—and salespeople haven't taken to this, even when they received extra time off to compensate for it. The wartime labor pinch lately has made it increasingly difficult to get reserves to fill in during these extra hours.

• **Later Openings**—To give employees relief, most stores which have recently inaugurated later closing one night a week have coupled this with later opening on the morning of the same day. New York specialty shops generally are making up for their Thursday 9 p.m. closing with a Thursday noon opening. Even stores which have had open nights for many years are now adopting this procedure—Newark (N. J.) stores are an example.

Thursday, favorite night for late closing, is the traditional "maid's night out." Moreover, Thursday is usually a comparatively slow day for department stores, so that a late opening then helps to even out the week's volume. Wednesday is next most popular. Stores in Akron, Canton, Dayton, and Cleveland picked Monday night to take advantage of Sunday advertising and give employees a longer weekend with a Monday noon opening.

• **Stores Cooperate**—Few stores can tell whether night openings have increased their total volume, particularly in a time of rising retail sales like the present. Many stores believe that a night opening takes a bite out of Saturday business. Most of the night openings inaugurated as a result of the war have been cooperative—the bulk of the retailers in a city have agreed to open simultaneously on the same night.

Formerly, of course, the idea behind night opening was purely competitive. One store would try leaving the furniture and home appliance departments open one night a week so that momma, poppa, and the kids could all come in together. This would bring some extra business and the store would decide to get an edge over competitors by having all departments open. Then other stores would follow suit—and the competitive advantage would be gone. Once firmly established the night opening could not be easily discontinued.

• **Blackout Problem**—Retailers in cities along the East and West coasts know that it would take just one Japanese or German bomb to quash night openings entirely. San Francisco stores were asked to open and close earlier immediately after the first air raid alarms, to give shoppers and employees time to get home before the blackout, and are just now going back on their normal schedule.



PARAFFIN SEAL

To eliminate both rubber rings and metal tops from home and commercial canning, Glenn A. Toaz of Cleveland has invented and patented an all-glass (or all-chinaware) jar, now the subject of tests by three glass manufacturers. The top, like a milk bottle lid, rests on an inside ledge, is sealed with paraffin around its beveled perimeter. A paraffin cone is poured into the center opening of the lid, and the vacuum seal is obtained by whirling the lid to expel air. When contents cool, the shrinkage produces a vacuum.

It's a Rebate

High court rules against co-op's patronage dividend on coal as violation of Guffey Act, suggests appeal to Congress.

Consumer cooperatives have lost their fight to get the Supreme Court to rule that a patronage dividend is not a "rebate" or a "kickback." Upshot of the defeat is that cooperative wholesales can't distribute coal under the Guffey Act without changing their methods so radically that the movement would virtually be put on the shelf.

• **Coal Division Rules**—The ruckus over the legal status of patronage dividends started about a year ago out in the Midwest. There the bituminous coal division of the Department of the Interior outlawed the Midland Cooperative Wholesale on the grounds that rebates "in any form or by any device" are contrary to the Guffey Act's code of fair practice (BW—Mar21'42,p58).

Promptly the cooperative took the case to the U. S. Circuit Court of Appeals, contending that no money was being passed out illegally.

● **Now Up To Congress**—Last week the highest court in the land refused to review the matter, saying that the decision of the circuit court was in accordance with the law itself, and that the only redress is to get the law changed. That means the consumer co-ops have to put their problem up to Congress.

Ford Going on Air

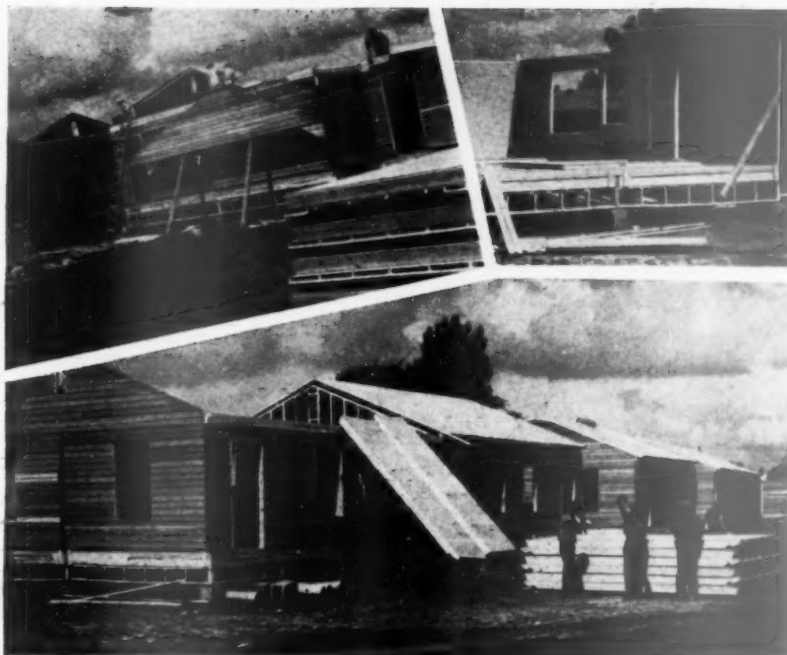
Added impetus is given to goodwill-advertising trend, which is getting a boost from the industrial salvage campaigns.

Ever since General Motors decided to spend better than \$1,000,000 for institutional advertising on the Columbia Broadcasting System (BW—May 16 '42, p57), the radio fraternity has been sitting on Ford's doorstep, hoping for a counter-splurge. For a while things looked pretty hopeless, because Ford only a few months ago canceled the Sunday evening program of classical music. But last week Ford decided on a campaign just as big and farflung as GM's. ● **News Every Evening**—Details aren't plotted completely so far, but it appears that Ford will sponsor 15 minutes of news every evening of the week on the Blue Network. Estimated cost: \$1,200,000 per year for air time alone. With the start of the radio program, two brand new Ford helpers will also get started—the Maxon agency, now in charge of the account, and Steve Hannagan, appointed to handle Ford's public relations work.

And thus the goodwill-advertising trend gets a mighty impetus.

● **Salvage Drives Help**—The trend is also gathering momentum from another direction. The salvage campaigns which various industries have been conducting to bolster supplies of metal, rubber, etc. (BW—Jun. 27 '42, p20) are calling for around two and a half million dollars of advertising. And because such drives are a good outlet for both patriotism and advertising, the Advertising Council (the industry's liaison with Washington) has been urged to stir up a new "War Information Plan."

This suggested plan proposes: (1) that the Advertising Council find out which themes the government wishes publicized, then supply this information to industry; (2) that each industry, or combinations of industries, pick a topic and sponsor its promotion; (3) that such promotion be backed by adequate funds to do a good job; and (4) that the Council, in cooperation with the industries, shall plan, clear, and secure approval of such advertising from the government.



FROM FLOORING TO ROOF...

A matter of minutes

In Portsmouth, Virginia—5,000 Homasote Homes for Navy Yard workers and their families are now going up—at the rate of 60 or more per 10-hour working day. That's one every 10 minutes!

Tomorrow—all over the country—Homasote Homes for large-scale realty developments, employee housing and slum clearance may be built even faster.

Yes—faster than one every 10 minutes! To produce 60 houses daily in Portsmouth—Barrett & Hilp, Contractors of San Francisco, who are building the project—use only 53% of the capacity of the prefabricating plant they have set up near the site. Any time the site-clearing operations catch up with them, Barrett & Hilp can raise their output to 112 houses a day.

The size, speed and quality of the Portsmouth project are made possible by: (1) Homasote weatherproof insulating and building board, and (2) the Homasote Precision-Built Method of Construction pioneered in 1935.

Homasote, which has great tensile and transverse strength, is made in large

panels up to 8' by 14'. Homasote Precision-Built Construction is unique in that it is based on large panels—because they save time and labor, eliminate unsightly batten strips and wall joints.

This prefabrication system uses local labor and standard materials—permits complete freedom of design—for any style, any size of house. \$6,000,000 of architect-designed Homasote Homes were sold to private owners, before Homasote enlisted in the War Housing Program.

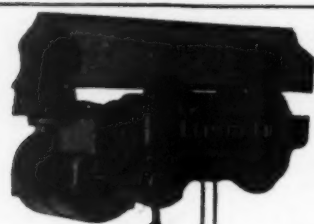
After the present emergency the normal demand for homes, now held in check by wartime necessity, will be released. In addition, vast markets for low-cost housing will be opened up—for the first time—by the speed and efficiency of Homasote Precision-Built Construction now being proved in such projects as Portsmouth. Write for complete information.

HOMASOTE COMPANY, Trenton, N. J.

REALTORS... Write for details on Homasote Precision-Built Homes—your best means of converting idle property into profitable home-sites.

H O M A S O T E
Precision-Built
H O M E S

For the first five months of '42, Business Week stands 3rd in total advertising pages and 1st in pages gained among the 117 magazines tabulated by Printers' Ink.



Meet production schedules promptly with the help of ElectroLifts in your plant. Lift and carry loads ranging from $\frac{1}{4}$ ton to 6 tons—easily, quickly, safely and economically. Leading plants everywhere use ElectroLifts.

ELECTROLIFT, Inc.
30 Church St.
New York, N. Y.

Quiet operation—close head-room, simple, rugged construction—rope or push button control.

Address Dept. BW for CATALOG



I LIKE TO TRAVEL TOO...



one, be sure Business Week (that's me) comes along.

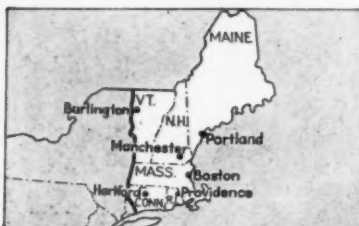
I start out from Albany, N. Y., every week and I can trail you to your new spot just as easy as I've been making the old one. And I'll like it, too. All you have to do is give me orders... like this:

Circulation Dept., Business Week
330 West 42nd Street, New York City
Please change my address.

NAME
OLD ADDRESS
NEW ADDRESS

The Regional Market Outlook

BOSTON (Income Index—157.6; month ago—156.9; year ago—124.8)
—As in the nation, New England production backs and fills under the stress of war expansion and civilian curtailment. Layoffs in consumer goods lines continue, as at shoe-making Lynn, Haverhill, and Cambridge, Mass. With jewelry and textile jobs down, Rhode Island industrial employment has actually declined since Jan. 1. Even around Hartford, top district boom area, man-hours fell off.



62,573 sq. mi. pop. 8,018,906

ST. LOUIS (Income Index—165.9; month ago—164.3; year ago—128.5)
—Prospects for income gains in this widespread region appear to be settling back nearer the national norm. Lately, the flow of war projects into the district has declined.

For the immediate future, employment will be rising smartly in the St. Louis and Louisville areas, and in numerous arms towns, notably in Arkansas. So sharply is Evansville on the upbeat from priorities dislocations that new and converted war factories will absorb the local labor force and require the importation of 5,000 workers by the year end. But in the aggregate for the district, an ultimate payroll ceiling is now in sight for the American worker.

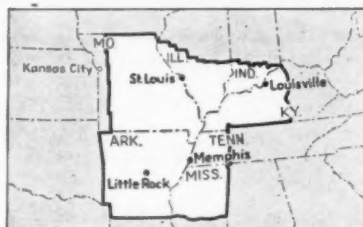
Moreover, cotton prices have eased and the crop has been delayed by wet weather, resulting in the abandonment of some plantings. Thus, southern district rural potentials will be up over 1941,

But income trends generally are up—even more than the nation's. Connecticut war industry alone will require over 75,000 new workers by the year end. Shipyard hirings are mounting fast at Portland and Bath, Me.; Portsmouth, N. H.; Quincy and Hingham, Mass.; Providence, R. I.; and Groton, Conn.; and arms work is expanding at Springfield, Worcester, and some eastern Massachusetts towns. To top all, the flow of contract awards is outstripping production rates.

Maine farm income, as the result of a 100% increase in potato prices over a year ago, is up sharply. In other states, agricultural gains have been below average. However, pasturage and hay condition has markedly improved since last year, cutting down the expense of feed going into increased livestock and dairy receipts, and boosting net returns. And with sugar short, maple products are bringing bonus prices.

but not by as much, perhaps, as in the nation. Tobacco is coming along well in western Kentucky and Tennessee, however, and livestock, dairy, and poultry receipts in the north continue to run high.

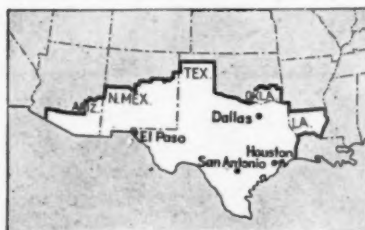
In short, whether autumn income trends will continue to outstrip the nation's depends upon (1) summer weather and (2) awards for additional facilities. But with farm prices high and war work rising; no sharp drop is likely.



195,902 sq. mi. pop. 10,187,405

DALLAS (Income Index—162.5; month ago—159.8; year ago—136.2)
—Despite recent weakness in prices, cotton prospects have brightened here. Chopping and cultivating operations have speeded up, almost to seasonal norms. The crop has been delayed, of course, particularly by heavy rains in the northeast part of the district. But with sub-soil moisture plentiful, hot, dry weather can yet produce a bumper pick.

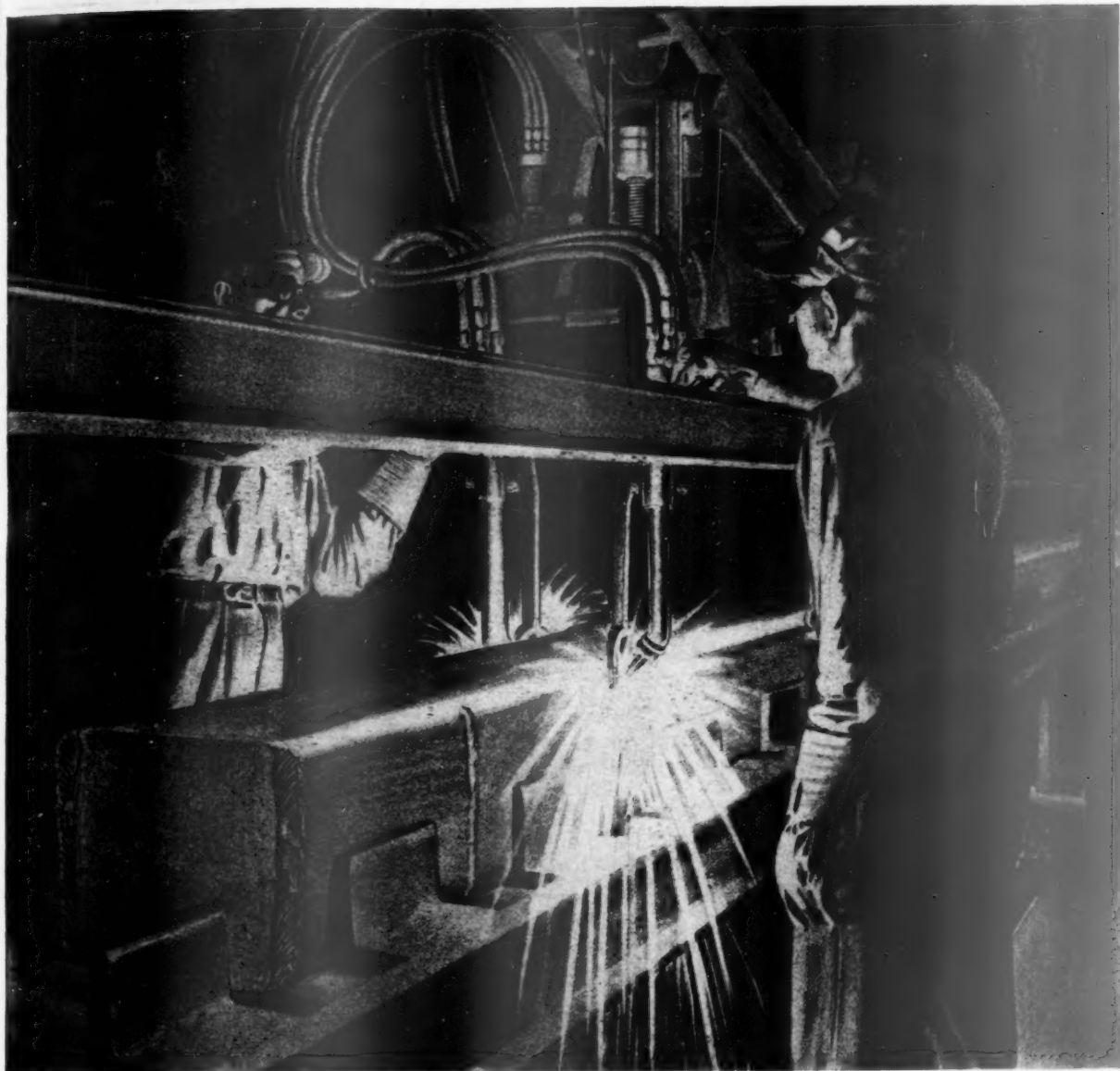
Harvesting of wheat—60% more of it



386,447 sq. mi. pop. 7,733,748

than last year—is in full swing up in the Texas Panhandle, where war projects have recently been located in and around Amarillo. East Texas tomato returns are coming in good volume, but central Texas onion growers will suffer from poor prices and low yields. Corn, hay, and other feed crop progress is average. In the west, ranges are lush, cattle fat, and stockmen prosperous.

War construction work is accelerating in northeast sections—at McGregor, Killeen, Daingerfield, Karnak, Paris, Gainesville. This reserve district is getting better than 10% of all military projects, and the recent boost in pay for the armed forces will add many millions of dollars to purchasing power at numerous camp and base sites. With five times the per capita plant awards as the nation, the Gulf Coast from Freeport to Orange is rapidly overcoming petroleum dislocations, and payrolls are sharply rising.



BILLETS TO BULLETS FASTER!

BY reducing billets to slugs faster, this recently perfected Airco machine gas cutting application speeds shell production. The Airco cutting torches — as many as ten can be mounted in this new Billet Nicking Machine — make simultaneous cuts a fraction of an inch into a billet, at a speed of from 20" to 30" per minute. After nicking, a sudden blow produces a clean break.

This new Airco developed cutting application reflects the ability of Air Reduction's Research and Development Engineers to quickly fulfill new

industrial needs. Thus, Air Reduction customers are first to benefit from many oxyacetylene applications now speeding war production.

Even as they have revolutionized all-out war production, so in the peace to come these processes will show the way to better products, machines and structures at less cost.

If you work with steel, it will pay you to keep abreast of the rapid growth of oxyacetylene processes for cutting, welding, cleaning and hardening. Airco will gladly assist you in their pertinent application to your needs.



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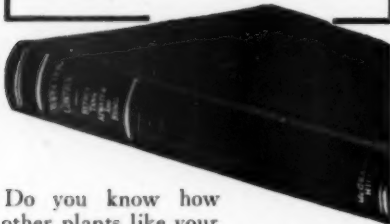
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**quicker—
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**through modern production
planning and control
methods**



Do you know how other plants like your own control their procurement and storage of materials—routing of operations—dispatching? How they control quality and inventory—what production records they keep—how they follow up details? Here is a book written out of actual industrial practice today, that tells you specifically and in detail.

Bethel, Tann, Atwater and Rung's

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Tremendous pressure on industrial plants today means just one thing—better planning and control methods. This book grew out of a survey of current factory methods in 185 representative companies in all types of industry. It offers you complete analysis and discussion of planning and control, the fundamentals involved, case histories to illustrate applications, library of good control forms, etc. See what valuable suggestions and ideas you can get to apply to your own problems. Send for a copy today.

Look up in this book:

- the discussion of the 4 basic factors in forecasting production volume
- the explanation of the 3 types of budgets
- the treatment of the cycle of production planning
- the examples of purchasing and stores records
- the routing charts
- the example of a master control schedule
- the discussion of planning boards
- the study of when, where, and how much to inspect, etc., etc.

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Company BW-7-4-42

LABOR & MANAGEMENT

Detroit Hunts Help

Hiring the 80,000 women needed by auto industry will require a big recruiting drive and will bring new problems.

Three significant facts were apparent this week about the Detroit labor market, a "problem area" which has probably received more Washington attention than any other production center:

(1) Re-employment has absorbed practically all of the workers who were displaced by conversion.

(2) The area is "over-contracted" in terms of its labor supply.

(3) A full-blown recruiting drive—the first such the country has ever witnessed—will be necessary to get a needed 80,000 women into war jobs.

• **New Employment Peak**—Well over 500,000 are currently employed in Detroit manufacturing as against the previous all-time peak of 430,000, reached last year when plants were running full tilt to turn out the last automobiles before the changeover.

War Production Board studies indicate that 660,000 will be employed in Detroit manufacturing by next November, and that after that date new workers must still be found until the peak requirement of 746,000 employees is met, more than a year from now (BW—Jun.13'42,p16). WPB's sanguine estimates on the area's labor potential have led it to hope that needs during the next six months can be met without large scale migration of workers from other areas. But the fear already exists that more work has been let in the auto city than available manpower can finish on schedule.

• **Future Contracting**—This is bound to influence the letting of future contracts. While Detroit, because of the nature of its industrial plant and its experience with mass production (BW—Jun.13'42, p16), will continue to get new and difficult war contracts, the labor pinch will inevitably keep away new war work which can be performed just as well elsewhere. Likewise, it is expected that certain jobs no longer involving production difficulties will be moved out of the city.

If its labor needs are to be satisfied short of a directed migration of workers from other production centers, Detroit

Advertising employed to back up Detroit's campaign to enlist 80,000 women for war production work may follow the pattern now being used in

England. Played down is the compensation angle; played up is the patriotic appeal. Every advertisement carries the "War Work" banner cut.

industry will have to scrape the bottom of the barrel of local resources, use all known methods of quick training, and then invent a few new ones.

• **The Woman's Angle**—Up to now, only one out of every ten to eleven factory workers in Detroit was female, in comparison with the national average of one out of every four in manufacturing. The proposed employment of at least 80,000 women who are not normally a part of the working population means that Detroit facilities and practices will have to be changed, in many instances drastically.

New restrooms and medical attention centers will have to be built. Jobs will have to be re-engineered to conform to state regulations on female employment. These prohibit the employment of women in lifting loads over certain set weights, in certain types of overhead work, in jobs requiring constant standing, in handling certain types of substances, or for anything in any way detrimental to their "potential capacity for motherhood."

• **Training Courses**—At present there are probably more than 3,000 women in pre-employment training courses conducted by the vocational department of Detroit's school system. Thousands of applicants for job training have been interviewed by offices of the U. S. Employment Service. Nevertheless, getting the 80,000 will require an unprecedented recruiting drive. Advertising ingenuity will be concentrated on an appeal to economic and patriotic consideration.

Akron's Latest

General Tire's workers walk out over rehiring of own members—aliens laid off last December—in novel strike.

The world's rubber capital at Akron has had more than its share of labor difficulties in recent years, but last week it witnessed a work stoppage that was unique even in its varied and colorful labor history.

• **Union Strikes Against Itself**—When members of Local 9, United Rubber Workers Union at General Tire & Rubber Company, halted production in the company's mill room last week, they were striking, in effect, against their own union.

Actually, the strikers were protesting the return to work of 25 aliens and fellow-unionists who had been dismissed last December pending a clarification of their status by the War Department. That procedure was followed by all of Akron's rubber firms working on war orders.

• **Question of Seniority**—When the



HOME WORKSHOP

Gives Relief for Wartime "Desk Jitters"

HOLDING down a desk job in a plant that's geared to fast-moving, seven-day, war-time schedules takes something out of the average worker—whether he's employer or employee. That something, say doctors and psychologists, can be restored by adopting a creative hobby.

One eastern university has set up a complete wood and metal working workshop where students are overcoming their mental conflicts and finding new happiness and confidence by using their hands as nature intended—in making things.

Tens of thousands of nerve-strained business and professional men have found health and mental poise by following the prescription of a definite amount of hand labor at some creative hobby.

Home Workshops Aid in War Production Program

Today hundreds of men who adopted handcraft hobbies to find relief from war-time nerves are assuming an important role in America's war production program.

By authority of the War Production Board, all home workshops and home

craftsmen in the United States are being registered for possible participation in war production as sub-contractors. In some localities, home workshops are already engaged in filling war order sub-contracts.

Send for this FREE Book today!

"Happiness is in Your Hands". It gives full details of how happiness can be obtained through creative handwork—and contains practical suggestions for building up your own home workshop.



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let "Happiness is in Your Hands".

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Need More Steam?

Iron Fireman Stokers Step Up Steam Output

10% to 35%

Convert Now to Automatic Coal Firing

VASTLY increased need for war materials demands more steam output from existing boilers. Iron Fireman stokers are doing this job in tens of thousands of boiler rooms in war production plants and essential civilian industries. In addition, they are firing coal automatically and conserve man hours by giving firemen more time for productive work. Iron Fireman stokers are relieving transportation facilities by saving railroad car-days, by burning less coal, and by burning local coals with high efficiency.

Iron Fireman stokers fire high and low pressure boilers developing up to 1,000 or more horsepower. They are delivered as complete units, with all control equipment—hence are quickly installed.

An Iron Fireman installation in your plant or building boosts all-out effort to the maximum. To learn what Iron Fireman can do for you, see your local dealer or wire, telephone or write IRON FIREMAN MANUFACTURING CO., 3277 W. 106th St., Cleveland, Ohio. Plants at Cleveland; Portland, Oregon; Toronto, Canada.



IRON FIREMAN Automatic Coal Stokers

War Department approved the rehiring of the aliens, the mill room workers halted production of stock flowing to the tire and tube departments, making some 500 employees idle. The strikers contended that the return of the aliens would cause other millmen with less seniority to be laid off.

Despite the threat of expulsion by the union's international office, which had been instrumental in clearing the aliens' status, the "outlaw" stoppage continued for two and a half days.

• **Terms of Resumption**—Then, after a plea from Under-Secretary of War Patterson, the strikers returned to their mills, but only on condition that the aliens return in small numbers over a period of time during which millmen with less seniority could be transferred to other departments.

Push Murray Plan

C.I.O. renews drive for labor participation in direction of war effort. Union moves in steel industry offer opening.

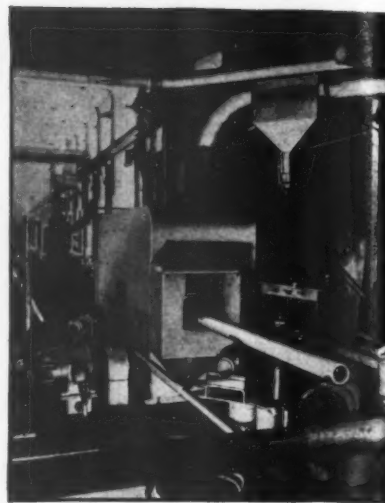
Timed to coincide with Donald Nelson's production report to the Senate in which the WPB chief singled out the steel scrap situation as an example of how material shortages impeded production, C.I.O. president Philip Murray's current demand for a labor-industry conference to deal with steel industry problems marks the re-opening of a determined campaign to promote the "Murray Plan."

• **What C.I.O. Wants**—The Murray Plan calls for the creation of industry councils, representatives of management, labor and government, which would be given authority to allocate raw materials, route orders, and regulate individual firms for the single purpose of increasing the industry's war production.

Although every C.I.O. union convention passes a resolution favoring the immediate adoption of the Murray Plan, little has been heard about it from its sponsors since the United States went to war.

The full-throated campaign for its acceptance died down largely because labor was convinced it would have a more powerful voice in direction of the war effort under Nelson when he took over. Also, it seemed politically expedient for the C.I.O. to soft-pedal its demands because the plan had become pretty well identified in the public mind as a device conceived to promote the interests of a single group.

• **Steel Offers Opening**—Its resurrection at this time may be attributed in part to the C.I.O.'s feeling that the labor-management committees aren't giving them the real voice in business affairs



ABRASIVE PIPE SCALER

To speed up the removal of heat-treat scale from seamless steel pipe in the plant of National Supply Co., Spang-Chalfant Division, the American Foundry Equipment Co. installed a new system including one of its airless Wheelabrator centrifugal blasts for descaling pipe exteriors and an air blast for interiors. Pipes of various diameters from 2 to 14 in. move through blasts of steel grit abrasive continuously, the cleaning speed of a 4½-in. low carbon pipe being about 14 to 18 ft. per minute.

which they expected to have (BW—Jan. 20'42,p70) and in part to recent developments on the labor front.

Murray's Steelworkers Union is on the eve of signing five major agreements which will cover more than 70% of the steel industry. These agreements will bring Bethlehem, Republic, Youngstown Sheet & Tube, and Inland Steel into contractual relations with the union for the first time. In addition to the four Little Steel companies, a new contract giving the union exclusive bargaining rights in U. S. Steel plants will soon be negotiated. When the papers are signed, only Weirton Steel and American Rolling Mills properties will be outside of the union fold.

Murray and his associates would like nothing better than to short-cut the long organizing campaign which will be necessary before these two hold-outs are brought into the labor union's camp. They feel it can possibly be done by forming an industry council on which labor is fully represented and arming that council with authority to issue orders and crack down on "non-cooperative" firms.

Such a council could also serve as a first step toward the establishment of

industry-wide collective bargaining—an objective which the steel union is anxious to reach.

• **Echo of Murray-Lewis Fight**—Another reason for the re-appearance of the labor-management council idea is the contest between Murray and John L. Lewis for labor leadership. Murray knows that if he can get the government to adopt the Murray Plan, with its grant of responsibility and authority to the unions that Murray controls, he will have gone far to stand off the Lewis challenge to his suzerainty.

In pushing the Murray Plan idea, the C.I.O. will use all examples of "management failure to meet production quotas" that it can find. Achievements of plant labor-management committees will be widely cited to make the point that if production benefits can accrue from such an arrangement on the plant level, greater benefits may be expected from such collaboration on the industry level.

Whatever industry admits or the WPB makes public about production difficulties will be used to document the union claim that industry councils are what the country needs.

• **Cash on Hand**—Union funds, now growing at a prodigious rate and available for immediate use because strike reserves no longer have to be accumulated, will finance a major promotion campaign by the C.I.O. to put the Murray Plan over.

Ford to NWLB

Dispute over renewal of contract is certified at UAW request. Chrysler deadlock also headed for Washington action.

The deadlock between the Ford Motor Co. and the C.I.O. United Automobile Workers Union is now in the hands of the National War Labor Board after failure of three weeks of negotiations in Detroit to reach settlements over such disputed points as pay raises, continuation of the checkoff, and a grievance system.

• **Certified at Union Request**—The dispute was certified to NWLB by Secretary of Labor Perkins, at the request of the union. The union's action inferred that it believed the dispute centered around issues on which it might readily win before the board—for instance, the checkoff, opposed by the company (BW—Jun.20'42,p50).

Placing of the Ford case before the board followed by a day a deadlock in the Chrysler-UAW negotiations which promised to wind up in Washington.

• **Same Wage Demand**—The Ford case, the Chrysler case, and the General Motors case, now in its closing stages be-

An Announcement by BUELL ENGINEERING COMPANY, Inc.

* * *

Buell Engineering Company, Inc. announces it is discontinuing its non-exclusive sales agency agreement with **B. F. Sturtevant Company**, as of August 1, 1942.

This agreement, entered into in March, 1939, authorized the **B. F. Sturtevant Company** to sell in their name **Buell (van Tongeren)** dust collectors in the continental United States and Alaska on a commission basis. Buell however has been entirely responsible for the design, construction and operation of all **Buell (van Tongeren)** dust collectors sold by **Sturtevant**.

After August 1st, 1942 all inquiries for **Buell** equipment and services should be directed to **Buell Engineering Company, Inc.**, 70 Pine Street, New York City, or to the company's own established sales representatives located in principal cities as follows:

Atlanta, Ga.—**MOORE-BROACH ENGINEERING CO.**...412 Title Building
Buffalo, N. Y.—**HENRY F. SPROULL**.....319 Jackson Building
Chicago, Ill.—**D. H. SKEEN & COMPANY**.....1 La Salle Street
Dallas, Texas—**A. M. LOCKETT & CO., LTD.**.....305 Magnolia Building
Detroit, Michigan—**THE POE COMPANY**.....2842 West Grand Blvd.
Houston, Texas—**A. M. LOCKETT & CO., LTD.**.....1014 Electric Building
Milwaukee, Wisc.—**THE DORNER COMPANY**.....2766 N. Downer Avenue
New Orleans, La.—**A. M. LOCKETT & CO., LTD.**.....308 Whitney Building
Philadelphia, Pa.—**WM. P. MACKENZIE**...1211 Commercial Trust Building
Pittsburgh, Pa.—**D. D. PENDLETON**.....418 Bessemer Building
St. Louis, Mo.—**B & B COMBUSTION EQUIPMENT CO.**..4030 Chouteau Ave.

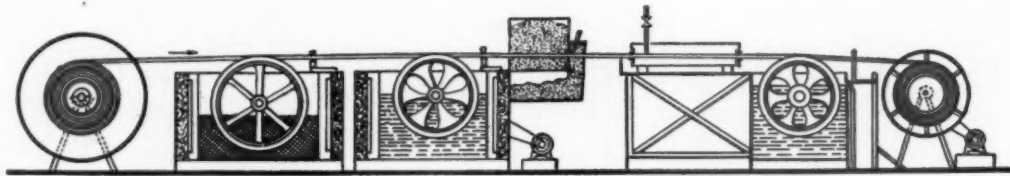


BUELL ENGINEERING COMPANY, Inc.

70 Pine Street, New York

WAR

is engineered scrap →



This war machine was built from an old pulley, the rear wheels of a truck and odds and ends of sheet steel.

It will never fire a projectile nor drop a bomb. But if our enemies really understood America it would frighten them.

The function of this scrappy gadget is to renew the weather-proofing on electric power wire . . . wire that would otherwise have to be junked.

▶ But war teaches us to look beyond machines to the hearts and minds of the men who make them.

In such perspective the device shown above takes on deep significance. It becomes a mechanical parable on the ingenuity of men whose job it is to keep electric power flowing to the vital war industries, regardless of shortages of copper, steel, rubber, aluminum.

▶ There are hundreds of such parables in every war-converted industry. Here are just a few from our great electric power plants:

. . . tons of bolts are being saved by a new method of rigging crossarms on electric poles.

. . . a southern generating station found its dam weakening. To keep the power flowing, holes were bored through the concrete and the dam bolted to bedrock!

. . . to avoid a shutdown, a middle-Atlantic utility worked out a method of stopping leaks around the giant valves controlling its water supply by mixing sawdust with the water. It worked.

. . . a western company bought old suspension cables from the wrecked Tacoma Bridge, untwisted them and used the metal as concrete reinforcement.

So goes the saga of electric power, as the industry does its share in the common task . . . With much of its trained man-power in the services, with priorities available only in the most urgent cases, the American utilities are showing the stuff American management and labor are made of.

But where are the stories of plants rushed into being almost overnight to supply electric energy?

As an American, you can thank your lucky stars such stories are few. Generating plants and power lines take years to build. For instance, our country's power equipment at the start of the war represented an investment of more than the present combined cost of the two-ocean navy and lend-lease expenditures.

War conversion for this vigorous industry was almost as simple as pushing the light switch on your reading lamp. The power was there because energetic managements had created it in the normal course of American life.

Some rush construction was necessary, but the electric power industry was first in war *because* it had been first in peace.

▶ The story goes back to the depression years. The utilities were the first to shake off the doldrums. By 1935, they had already passed 1929 levels.

. . . By the time the war broke out in Europe, America's giant electrical capacity surpassed that of any combination of potential enemies.

. . . It has grown since then, with 3½ million kw. capacity scheduled to be added in 1942. This year, the industry also will spend 150 million dollars on maintenance alone.

▶ Because of these private expenditures, because the electrical companies started years ago to sell women on the convenience of electrical home appliances . . . and because the industry has always built in advance of demand, it was ready for either peace or war, with the world's greatest system of power production and distribution.

★ ★ ★

In recognition of the miracle of war production—accomplished through the cooperation of American management and labor with the W. P. B. . . . this advertisement is published by the McGraw-Hill Network of Industrial Communication.

McGraw-Hill PUBLISHING COMPANY, Inc.

330 WEST 42nd STREET

NEW YORK

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WITH A POSTSCRIPT FOR BUSINESS EXECUTIVES

PERHAPS you saw the advertisement on the opposite page, in the newspapers.

Did you notice those five examples of the way in which maintenance men are meeting the problem of war operation?

That's what this page is about.

If one public utility maintenance man works out a new way of reconditioning wire, his idea becomes really valuable to the country when all maintenance men with a similar problem find out how he did it.

If one man experiments with silver and bismuth as a substitute for tin solder, that becomes great news for a man who needs tin solder and can't get it.

That's why industry after industry has been able to meet the war production challenge . . . by swapping ideas.

► In industry, this idea swapping is done mostly through the editorial and advertising pages of the industrial press.

McGraw-Hill, for instance, keeps 153 editors and 725 engineer-correspondents busy digging up new methods of doing things.

Industrial advertisers, too, often send men

into the field to discover new ways of making their products do more work, or last longer.

When such practical editorial and advertising information is distributed to the readers of the 23 McGraw-Hill publications, the value of each idea is multiplied by thousands.

So valuable is this interchange of technical information that many companies are surveying their organizations to make sure that the supply of Industrial Magazines is adequate.

► If you would like suggestions as to how to conduct such a survey, just write to Reading Counselor Department, McGraw-Hill Publishing Company, Inc., 330 West 42nd Street, New York.

★ ★ ★

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More than 1,000,000 of the executives, designers and production men, who give America her world supremacy in technical "know-how", use the editorial and advertising content of the 23 McGraw-Hill publications as a means of exchanging ideas.

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Engineering & Mining Journal

E. & M. J. Metal and Mineral Markets

Engineering News-Record

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LIQUIDS, PASTES, AND POWDERS

ANY QUANTITY
GAUGE
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(1 thru 15 gallon)

Immediate Delivery
TO WAR PRODUCTION

CANADIAN INQUIRIES INVITED

**VULCAN STAMPING
& MFG. CO., INC.**
BELLWOOD • ILLINOIS

Turning the "Searchlight" on Opportunities



wanted — pattern work

• **OLDEST ESTABLISHED** pattern and machine works on Long Island can take on additional wood and metal pattern work. Eppenbach, Inc., 4510 Vernon Blvd., Long Island City, N. Y.

• **IN SOUTH AMERICA.** Industrial Consulting Engr. Appraisals. Factory planning, organization. Local negotiations, purchases. 5 years chief engineer Fabrica Argentina de Alpargatas. D. B. Parsons, Bme Mitre 341, Buenos Aires.

• **DIRECT MAIL LIST SERVICE.** Daily corrected mailing lists, guaranteed 98%, covering purchasing personnel of industry's major markets—Business Executives; Management and Production Officials of Manufacturing Industries; Chemical Process Industries; Electrical Industries; Food Industries; Metal-Working Industries; Textile Industries; Coal Mining; Metal Mining; Aviation; Bus and Transit Industries; Central Stations; Civil Engineering and Construction; Electrical Construction and Maintenance; Electronic Engineers; Power Engineers; Product Design Engineers; Photo Technicians; Mill Supply Houses; Electrical Appliance Wholesalers and Dealers; Mail Order Buyers. Ask for descriptive file folder. Direct Mail Division, McGraw-Hill Publishing Co., Inc., 330 West 42nd St., New York, N. Y.

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fore the board, have one point in common—wage raise demands of \$1 a day sought by the union.

It is agreed in automotive circles that the precedent set in the General Motors decision will govern action in the other two cases, as well as in other bargaining negotiations now going forward between the union and smaller automotive concerns. And the General Motors decision, it is agreed, hinges largely on precedent which may be set in the decision which the board reaches in Little Steel.

Mine-Boss Strike

Union of supervisors, who are defined by NLRB as both employers and employees, pulls a walkout with U.M.W.'s help.

Forgotten men of the coal mines are the assistant foremen, fire bosses, weigh bosses, and coal inspectors. In the twilight zone between the men who dig and load the coal and the men who count the profits and bemoan the deficits, they have been all but ignored in the rise of the United Mine Workers of America as the voice of the miner, and they also are as unwelcome as "partners" of the coal operators.

While the miner has been achieving substantial improvements in wages and working conditions, his immediate bosses, without a collective voice, have in many cases suffered acutely in the region of the pay envelope.

• **They Close a Mine**—Last week the mine bosses ceased to be forgotten men. With an unincorporated union of their own, the Mine Officials Union of America, a few of them went into action against Republic Steel Corp.'s Crescent No. 2 mine near California, Pa., and succeeded in shutting down a mine that feeds 4,000 tons of coal per week into Republic's furnaces.

Such a feat required cooperation from the miners and they gave it—a fact which was not lost on coal operators. And not until the 500 miners voted, in their U.M.W.A. local meeting, to return to work in accordance with their contract, was the mine bosses' strike ended four days later.

• **NLRB's Definition**—That the mine bosses have been neither fish nor fowl was substantiated a fortnight ago in a split decision of the National Labor Relations Board which held them to be an appropriate bargaining unit in another Western Pennsylvania mine and granted the M.O.U.A. petition for a yes-or-no election among 57 bosses.

The majority opinion (Millis-Leiser-son) declared that by the yardstick of the Wagner Act the supervisory officials were both "employers" (with re-

spect to the miners) and "employees" (with respect to the management), but were entitled to collective bargaining rights.

How this duality of interest might rise to torment the coal operators, how it might influence their future relations with the United Mine Workers, and how it might be employed to fan the flames of the John Lewis-Philip Murray conflagration within that union caused speculation during the Crescent strike last week.

• **Intraunion Angles**—It may have been a coincidence that the first M.O.U.A. strike broke out in U.M.W. District No. 5, whose leadership is passionately loyal to C.I.O. President Murray, but in a subdistrict whose executive board member is outspokenly loyal to U.M.W. President Lewis. In a showdown under a pretext of discipline for outlaw strikes, Lewis could make it embarrassing for the Murray adherents to defend themselves and conceivably could purge them if he chose.

Usually the mine bosses are men risen from the ranks. When they achieve boss stature, the U.M.W. drops them from membership and they are specifically excluded from protection in U.M.W. contracts. While the Labor Board case was being argued, U.M.W. announced its determination to press for inclusion of the bosses in future contracts if the board found them to be a bargaining entity.

Since then, however, M.O.U.A. officials in Pittsburgh claim they have talked things over with the U.M.W. in Washington and worked out a plan for "warm cooperation." Where this cooperation might lead is worrying the coal operators.

NORTHWEST'S STRIKE RECORD

The importance of labor relations in locating industry is attested by issuance of a new publication, "Strikes in the Pacific Northwest, 1927-1940," prepared by the Northwest Regional Council of Portland, Ore., with the cooperation of the U. S. Bureau of Labor Statistics and local government, educational, and business agencies throughout the states of Oregon, Washington, Montana, and Idaho.

The study shows that from 1927 to 1940, the strike record for the Pacific Northwest was identical with that of the country as a whole—1.5% of all gainfully employed persons. This is compared with a 3.5% average for Pennsylvania and a 2.4% average for Michigan.

Pointing out that 33% of the strikes in the Northwest were for wage increases and 31% for union organization, the study suggests that "the occurrence of strikes is less to be explained by geographical factors than by economic causes, political events, and conditions existing within individual industries."

War-Risk Rush

Property owners scurry to get insurance as new law goes into effect. Mortgages create numerous problems.

For the past two weeks, war damage policies have been the biggest headache producer in the property insurance business. Although enemy raid coverage went into effect last Wednesday, underwriters are still struggling with problems that sprouted when they tried to get the new program under way. Most

War Damage Corporation

(As authorized to operate by Executive Order pursuant to Section 101 of the War Relocation Authority Act, approved August 17, 1942)

WASHINGTON, D. C.

1 (USE TO)

2 (Mail address)

3 (Home address)

4 **IN CONSIDERATION** of the payment of the policy, the Corporation agrees to indemnify the Insured, and to pay to the Insured or to the person designated in the attached application, any and all sums which may result from **THEFT ATTACK OR DAMAGE TO ANY ACQUISITION TAKEN BY THE INSURED, NATURAL OR HIS PERSONS OR THE UNITED STATES GOVERNMENT, INCLUDING THEFT OFFENSE.**

5 That the Insured shall also indemnify the Corporation, its heirs, estate, or executors, in the full value of the property so insured.

6 The Corporation, however, shall not be liable to the Insured for such amounts, at the time loss.

7 The Corporation, however, shall not be liable to the Insured for such amounts, at the time loss.

8 Except as otherwise provided in this policy shall cover the property described in this application, but the amount of loss shall not exceed the amount of the premium paid.

9 Assignment of this policy shall not be valid except with the written consent of the Corporation.

10 The premium provided on the following pages shall be a part of this policy, and this policy shall then be subject to such other provisions, stipulations and agreements as may be added hereto, upon the signature of a duly authorized Executive Agent.

11 **IN WITNESS WHEREOF**, the Corporation has executed this policy, but this policy shall not be valid unless countersigned by a duly authorized Executive Agent of the Corporation.

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Insurance agents are working overtime to handle a flood of applications for the new war damage coverage which went into effect July 1. With details still unsettled, many knotty problems intervene between the application (below) and the final policy (above).

[illegible]

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THE MARKETS

Railroad securities caught the market's eye this week with a sudden exhibition of strength and moderate activity. At midweek, six of the ten most active stocks were rails. For the first time, the index of rail prices showed signs of prying itself loose from the floor it reached last spring.

• **Underlying Factors**—Most traders were not surprised when railroad issues finally abandoned their wallflower role. Earnings prospects for the immediate future are brighter than they have been at any time since the Twenties. The rail index might have turned up before now if rumors of early peace had not made the market wary.

This week a series of encouraging news items centered attention on the carriers. Atchison, Topeka and Santa Fe boosted its quarterly dividend from \$1 to \$1.50. Coupled with the Erie's earlier announcement of its first dividend in 76 years, this gave an impressive illustration of railroad earning power.

Atchison common jumped 1½ points on the news, and other rails edged upward sympathetically.

At the same time, the Association of American Railroads reported that net income of Class 1 roads in May rose almost 50% over 1941.

• **The Past Record**—Atchison's dividend was a particularly effective advertisement for railroad securities. For years before the depression the two Atchison issues, a 5% noncumulative preferred and a \$100 par common, were standbys with both speculators and investors.

In three depression years Atchison paid no dividends on the common, and less than 5% on the preferred. Last year common stockholders got only \$2 a share. (In the period 1927-1931 they got \$10, and for 20 years before that di-

vidends were never less than \$5.) This year Atchison has already voted \$3.50 in dividends, and if it sticks to the new rate in the fourth quarter, shareholders will get \$5.

• **Less Fear of Car Shortage**—Besides the earnings outlook, several other factors are pushing upward on rail prices. It now seems fairly certain that carriers will handle the traffic peak next fall without a serious car shortage (page 13). That means the specter of government operation has temporarily stopped frightening off potential buyers. Government ownership is still a bogey, but traders think that if the roads get past next October they will be out of the woods.

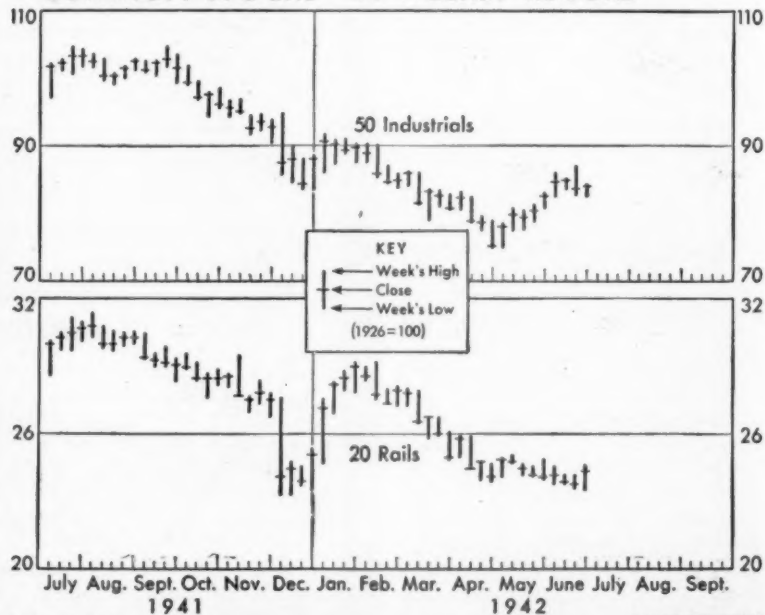
Wall Street was also reassured when the Interstate Commerce Commission announced a plan for setting up liquid reserves to cover maintenance deferred during the war period. Under the I.C.C. proposal, roads will budget for regular maintenance, even though labor and material shortages keep them from undertaking the work. Unused funds will be held in cash or government securities until the end of the war when they will be available for rehabilitation.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial . . .	84.2	83.7	82.8	97.2
Railroad . . .	24.4	23.8	24.1	28.6
Utility	30.3	30.5	30.3	44.0
Bonds				
Industrial . . .	107.2	107.6	107.8	104.3
Railroad . . .	83.6	82.5	82.8	87.0
Utility	104.6	104.5	102.4	106.5
U. S. Govt. . .	110.8	110.8	110.9	111.9

Data: Standard & Poor's Corp. except for government bonds which are from the Federal Reserve Bank of New York.

COMMON STOCKS — A WEEKLY RECORD



Data: Standard & Poor's Corp.

© BUSINESS WEEK

of them think it will take another couple of months to make the system run smoothly.

• **Old Rules Don't Always Apply**—A lot of the confusion arises because insurance companies don't write the policies themselves, but act as fiduciary agents of the War Damage Corp. (BW—Jun 13 '42, p24). This means they have to follow WDC regulations, and wherever the instructions don't fit the circumstances they run into trouble.

As one agent commented unhappily: "We have a manual of regulations with about 15 pages in it. In England they use a book three inches thick, and they still run into situations they don't have rules for."

• **No More Free Coverage**—In the last two weeks, the big problem has been to handle the flood of applications. The government's free "insurance" on all property expired July 1. (This was a temporary provision for reimbursement, voted by Congress just after the war started.)

New WDC policies are supposed to replace it, but until the middle of last month no machinery for writing the new coverage was available. When WDC finally announced its plan, property holders stampeded to get themselves covered before the deadline.

• **Mortgage Problems**—The time element has also complicated the problem of insuring various interests in mortgaged property. On some types of mortgage, the lender can force his debtor to take out raid insurance to protect the collateral. On others, it isn't clear who has to pay the premiums. On all mortgages a demand for extra insurance is likely to meet resistance unless it is handled delicately.

With a scant two weeks to cover their interests, banks and other mortgage holders had to sacrifice tact to speed. As a result, many mortgagors felt they were being abused and defied the banks to enforce their claims.

• **Small Liens a Problem**—By last Wednesday, most banks had arranged protection for all their large mortgage risks. Few of them had managed to get the small ones covered. Bankers say it will take them two or three months to work out arrangements for all the mortgages they hold.

In the meantime, lawyers are arguing bitterly over the question of forcing mortgagors to take out insurance. Some believe that the debtor has to pay the premiums in all cases. Others think that only the newer mortgages are worded tightly enough to put the burden on him. No two banks subscribe exactly to the same interpretation.

• **Determining Factors**—Eventually, the banks think, the majority of their mortgagors will take out insurance voluntarily. Rates are low, and where a debtor still has an interest in the property, he will probably want protection on his

own account. On a few mortgages where the debtor has no equity left, banks will probably have to take out insurance themselves.

So far, large mortgage holders have been hesitant about assuming the premiums, even in cases where they are sure the debtor will hold out. They are afraid that mortgagors who carry their own insurance will put up a howl if they see others getting a free ride. Most banks have now decided to leave the collateral uninsured while they try negotiation.

• **Rush Swamps Agents**—At first, however, many mortgage holders sent their debtors terse notes demanding insurance before July 1. This precipitated a shower

of frantic applications for immediate coverage. Agents found it impossible to draw up formal policies for all of them in time.

To ease the pressure, WDC gave agents last-minute permission to use binders instead of writing up formal policies. Under this system, agents were empowered to extend temporary protection by means of a simple memorandum giving the amount of the insurance and a brief description of the property.

This decision was a double relief to the agents. It spared them the work of writing up detailed policies during the rush period, and it also permitted them to postpone some of the tougher prob-

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lems of interpretation until they had more time and information.

● **Revisions Anticipated**—At present, many agents frankly admit that they will accept applications which a literal interpretation of the rules would outlaw. They are sure that the regulations will be revised to remove technical difficulties.

Fewer Failures

Active business reduces number of bankruptcies 16% and liabilities 19% "experts" face period of slim pickings.

A high level of business activity and a low level of business failures have always gone hand in hand. Consequently, it is not very surprising that today, with business at an all-time high, commercial bankruptcies are at the lowest level since the last war.

● **Liabilities Down 19%**—In the first five months of this year, 4,819 commercial and industrial organizations went bankrupt, according to Dun and Bradstreet, a decrease of 16% from the same period in 1941. Total liabilities were \$54,322,000, 19% under a year ago. Although direct comparison with earlier years is impossible, due to a revision in the basis of computation in 1939, the current level of failures is at least 5% under 1937, the previous post-1920 low.

The total number of bankruptcy cases of all types filed in United States District Courts in the first quarter of 1942 was 18% less than the preceding year, while the drop in the last half of 1941 was only 2%. It is likely that this downtrend will continue at least to the end of the current war boom.

● **Outlook for "Experts"**—This prospect of continuing decline makes the future look bleak to those attorneys, accountants, and referees who specialize in bankruptcy proceedings. To make matters worse, the ratio of nonasset cases to total failures is increasing sharply, since concerns with tangible effects have little reason to throw in the sponge these days. Main hope of insolvency experts has been the so-called "referee bill" (H.R. 4394), introduced a year ago.

The significant section of the bill would reduce the number of referees and put them on a full-time salary basis, instead of the present fee basis. Chief talking points for proponents of the measure are first that referees working on the fee system have a financial interest in the outcome of the proceedings, and second that the very poor return from nonasset failures unfairly penalizes those concerns with assets. But the bill is currently in committee, and prospects are that it will be left on the shelf for a considerable time to come.

THE TRADING POST

"The People, Yes."

As our country this week observes the 166th anniversary of its birth, we are hearing a great deal about war objectives and post-war programs. Vice-President Wallace, Under-Secretary Welles, Ex-President Hoover, and others have been telling us that this is "the People's War," that out of it must come new opportunities, higher standards of living, freedom for all the people of all races and nations. After we win the war, they warn us, we must win the peace. And if we are to do that we must be prepared to cope effectively with a century's accumulation of world problems.

It is heartening that men are thus thinking and planning for the future on a world-wide scale. For surely we all hope that this war will make possible a new world with brighter and broader horizons for all. The war is exacting a staggering price from this generation and from others yet to come; certainly we should be thinking and planning to get something out of it.

* * *

But—and it's too bad there must be a "but"—such a reorganization of the world is bound to call for a lot of unselfish thinking on the part of a lot of people of diverse nationalities and interests. And if we are to achieve so general a leveling up of opportunities and privileges among men, it is quite possible that many of us will have to be content with something less than we consider our due. Even the organized groups among us may face abridgment of what they have regarded as "rights."

Right now it looks as though much of the thinking, planning, and doing about these complex problems will be carried on right here in our own country. And that means by the men and women of this country—by you and me. For whatever we may do as a nation will reflect only the will of our people. They, after all, are "the country." So you and I and a lot of other folks like us had better begin thinking right soon about our parts in building this brave new world in which the little people everywhere are to get their break.

But sometimes I wonder just how we can get started on this world-wide job until we have learned how to do a lot better at our domestic job.

If our representatives who will sit in on the task of drafting and administering a new world program are to rise to their appalling responsibilities, we should be able to find in our own experience some evidence that our present representatives have learned how to put the national welfare above the narrow self interest

of their own constituents or, to put the worst face on it, of the highly articulate minority groups among those constituents.

To offer just one example: Freedom of trade between nations is bound to be one of the major specifications for a peaceful and prosperous world. But despite our 166 years of nationhood, the representatives of the American people in their various legislatures assembled, still do their best to erect and maintain interstate trade barriers in order to foster sectional and group interests. It has taken a World War, with its threat to the nation's security, to strike down some of these barriers to interstate commerce. And it is a good bet that once the threat is behind us we shall see an effort to set them up again.

When we recall that the free flow of interstate commerce, in the interest of domestic peace and well-being, was a major objective of those who wrote our federal constitution and that some of the most important clauses of that document were written to conserve it, it is disconcerting to observe the degree to which those clauses have been circumvented in the interest of regional, sectional, and other special interests.

I call it disconcerting because we, the people, whose representatives have done this within our national borders are the people whose representatives will attempt to draw up a charter for the peace and well-being of a new world.

* * *

To build a better world is going to require a better people. For no world can rise higher or remain higher than its people. That goes for every one of us. And if the American people, through their representatives, are going to put over the job they now are cutting out for themselves, they had better get in some intensive training on their home grounds before they tackle the world-wide circuit.

If we are going to submerge international partisanship, suspicion, jealousy, scorn, greed, and the rest of the qualities that militate against a world of peace and plenty, we had better begin to play down our domestic partisanship, suspicion, jealousy, scorn, greed, and the rest of the qualities that militate against domestic peace and plenty. Until we learn how to breed representatives capable of rising above the partisan interests of their "constituents" to cope with our own national problems, we are not likely to produce representatives equal to the world-wide thinking and planning that will be essential if the world of our aspirations is to become our world in fact.

W.C.



REJECTED— BECAUSE THE WEATHER CHANGED!

Let factory temperature change 15 degrees, and delicate machines and gauges may vary by several ten-thousandths of an inch!

To eliminate the rejections weather changes cause, many manufacturers have air conditioned their precision departments. They speed assembly, too, in rooms where finishing department temperature is duplicated. And they facilitate varied operations and processes, and increase workers' output, by controlling temperature, humidity, and air cleanliness.

Yes, air conditioning *does* pay in factories—particularly if the installation is tailored to meet individual needs. That usually means decentralized conditioners, rather than a central system. Decentralization gives flexibility and economy. It permits meeting ideally the divergent needs of different departments; allows weathermaking to be suspended when a department is closed. It localizes the shut-down should a unit be damaged. And it permits quick, easy installation, usually without ducts.

Because no two plants present identical air conditioning problems, it's wise to consult a *locally experienced expert* if you're considering an installation. An ideal collaborator is your resident Fairbanks-Morse engineer. His judgment is bias-free, thanks to the completeness of the F-M line. To meet him, simply write Fairbanks, Morse & Co., Dept. G131, 600 S. Michigan Avenue, Chicago, Illinois. Branches and service stations throughout the United States and Canada.



FAIRBANKS-MORSE
Air Conditioners

THE TREND

SOMETHING TO FIGHT FOR

Any event which turns our minds backward may also turn them forward. Thus, it is impossible to come to this wartime Fourth of July and its reminder of the sources of our national strength without thinking of that future for which we are now engaging our strength in battle.

All thought that is preparation for immediate action must now be devoted to the job of winning the war, but there is no downing of the speculative pondering that goes beyond the war, to the peace which is the whole object of our fighting.

Nor should there be, since the more good we can conceive of victory the harder we shall strive for it. Men who have much to fight for do better than those who have merely something to fight against, and the suspicion that the democracies have been exhorted too narrowly on what they have to fight against is well-founded.

• **Business men** have been cautious about postwar talk lest platform politicians use it for a charge against them as producers for the emergency now upon us. But government men who rise above the politician's level know that much of what we have to fight for can best be thought of in business terms and that, after the war, as now, they will need all the help that thoughtful business men can give them.

This has not yet been made clearer than in some postwar talk that a Swarthmore College graduating class heard recently from one business man in government. The speaker was Milo Perkins, Executive Director of the Board of Economic Warfare. What he said has already been published in a few places. Some of the things he said need still more clarification, perhaps some challenging. But, on this thought-provoking national holiday, business men can well try their own thinking against these salient excerpts from that talk about "the struggle that transcends the present war:"

"This is a long, long fight to make a mass-production economy work. The battle started when machines became important in the lives of men. It should be over within the generation following this conflict. The battle will be won when we have built up mass consumption to a point where markets can absorb the output of our mass-production industries running at top speed * * *."

• **"Complete victory** will not be won until there is a full and increasing use of the world's resources to lift living standards from one end of this planet to the other. The twentieth century is a time set apart for the winning of this total triumph. Humanity is not going back to the wolf stage."

"Men lost their battle to avoid this [military] war. It was lost primarily because the world was unable to distribute what it had learned how to produce. This failure was as true of trade within countries as it was of trade between countries. The nightmare of under-consumption was the

black plague of the prewar era. We put up with a civilization which was commodity-rich but consumption-poor too long to avert the present catastrophe * * *."

• **"Our young men** are fighting like tigers to keep this a free world. Their courage will bring us final military victory at the end of which we shall have the greatest production of raw materials, the greatest industrial plant, and the greatest number of skilled workers in all history. All this will exist side by side with intense want throughout every land. The bridging of that gap will present the greatest challenge any generation of young people ever faced * * *."

"Full-blast production for a gradually rising standard of living will be as necessary to win the peace as all-out production now is to win the war. It will be physically possible. Our No. 1 postwar job will be to make it fiscally possible. If we can do that, private enterprise will enter upon an era of unparalleled activity.

"The greatest untapped markets industrial capitalism has ever known will open up before us. Their development will be the one hope for our profit system * * *."

"The plain people will be understanding about the problem of readjustment. They will work hard for all this and they will walk any reasonable roads to these ends. But the chains of the ages have snapped. The one thing they won't do is to take 'no' for a final answer to their cry for full employment * * *."

"When the history of this period is written a couple of centuries from now, the present war may be treated as an incident of readjustment to the scientific realities of our times. In every civilization of the past, bar none, if men took the most that it was possible to produce and divided it among all who were alive to share it, the answer was always a miserable standard of living.

• **"Within your lifetime** and mine, however, men have entered an era dominated by the machine and the test-tube. If we take all that can be produced at the end of this war and divide it among the people who will then be alive to share it, we shall be within reach of a very good standard of living for the first time in all history.

"The job of the future will be to build up a mass consumption great enough to use this mass production * * *."

"Of course, there are changes ahead, but this evolutionary progress need not destroy our system of private enterprise. On the contrary, those changes can provide an environment in which our industrial capitalism can be strengthened enormously. We have it in us to measure up to this job of maintaining full employment * * *."

—To which the business man will add, "If we are given the opportunity to measure up."

The Editors of Business Week

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